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# Mobility Matters: Where Higher Education Meets Transportation

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*Higher education has long been hailed as the key to social and economic mobility. And yet, mobility itself is one of the greatest barriers to equity in higher education. Although scholars and policymakers have thus far paid scant attention to the role of transportation in higher education, this Article establishes why that oversight undermines educational equity.*

*Grounding its arguments in both interdisciplinary literature and rich original data from a multi-year mixed-methods research study, this Article demonstrates how transportation law and infrastructure affect college completion, disproportionately hindering completion for students of color. It further argues that higher education law and policy exacerbate, rather than alleviate, systemic transportation barriers for students, reinforcing education inequities.*

*This Article adds important dimensions to scholarship on both transportation and higher education. By focusing on the interaction between two structural systems, it offers a unique lens through which scholars can understand the complex landscape of higher education law. Finally, this Article offers education policymakers a range of policy and programmatic changes affecting transportation that can advance higher education equity.*

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## INTRODUCTION

College is key to the American Dream.<sup>1</sup> It is a pipeline to the middle class, providing opportunity for social and economic mobility.<sup>2</sup> At least, that is what we are told.<sup>3</sup> And yet, the benefits of higher education—and the burdens of paying for it—are not evenly distributed.<sup>4</sup> Certain demographic groups, including Blacks and Latinos,<sup>5</sup> are less likely to reap the financial and social mobility rewards touted by politicians and higher education advocates.<sup>6</sup> There are many reasons for these disparities. This Article marries original data with current literature to explore one previously underappreciated explanation for racial and ethnic college completion gaps: the way that transportation disparities affect access to, success in, and equity in higher education.

White students, on average, fare better at every meaningful postsecondary success indicator than students from other racial and ethnic groups. For example, while just over half of Black and Latino students earn a four-year college degree in six years, nearly 70% of White students graduate in that time.<sup>7</sup> Black students disproportionately pay for their college education with debt<sup>8</sup> and default at a rate six times higher than their White peers.<sup>9</sup> Latino students default at two and a half

1. See BARACK OBAMA, *THE AUDACITY OF HOPE* 159 (2006).

2. See ANTHONY P. CARNEVALE, STEPHEN J. ROSE & BAN CHEAH, *THE COLLEGE PAYOFF: EDUCATION, OCCUPATIONS, LIFETIME EARNINGS* (Vic Caleca ed., 2011), <https://files.eric.ed.gov/fulltext/ED524299.pdf> [<https://perma.cc/82KV-R6V2>]; SARAH REBER & CHENOAH SINCLAIR, *OPPORTUNITY ENGINES: MIDDLE-CLASS MOBILITY IN HIGHER EDUCATION* (2020), <https://www.brookings.edu/wp-content/uploads/2020/05/Opportunity-Engines.pdf> [<https://perma.cc/FJ7V-MQ9X>].

3. See Kate Sablosky Elengold, *The Investment Imperative*, 57 HOUS. L. REV. 1, 3 (2019) (arguing that Americans have adopted an “investment imperative” which is “the widely-held belief that higher education is necessary to increase one’s financial prosperity and social standing in America”).

4. See *infra* Section III.B.

5. Consistent with other scholars, I capitalize Latino and Black. Further, because most Latinos identify as such, rather than “Latinx,” see LUIS NOE-BUSTAMANTE, LAUREN MORA & MARK HUGO LOPEZ, PEW RSCH. CTR., *ABOUT ONE-IN-FOUR U.S. HISPANICS HAVE HEARD OF LATINX, BUT JUST 3% USE IT* 5 (2020), [https://www.pewresearch.org/hispanic/wp-content/uploads/sites/5/2020/08/PHGMD\\_2020.08.11\\_Latinx\\_FINAL.pdf](https://www.pewresearch.org/hispanic/wp-content/uploads/sites/5/2020/08/PHGMD_2020.08.11_Latinx_FINAL.pdf) [<https://perma.cc/9CXH-SZ2G>], I use the term “Latino” as a generic term to represent individuals who identify as Latino, Latina, Latinx, Spanish, or Hispanic.

6. See *infra* Section III.B.

7. Andrew Howard Nichols & Marshall Anthony Jr., *Graduation Rates Don’t Tell the Full Story: Racial Gaps in College Success Are Larger Than We Think*, EDUC. TR. (Mar. 5, 2020), <https://edtrust.org/resource/graduation-rates-dont-tell-the-full-story-racial-gaps-in-college-success-are-larger-than-we-think/> [<https://perma.cc/M434-3XN7>] (citing U.S. DEP’T EDUC., NAT’L CTR. EDUC. STAT., 2003-04 BEGINNING POSTSECONDARY STUDENTS LONGITUDINAL STUDY, SECOND FOLLOW-UP (BPS: 04/09) (2011)).

8. MARK HUELSMAN, *THE DEBT DIVIDE: THE RACIAL AND CLASS BIAS BEHIND THE “NEW NORMAL” OF STUDENT BORROWING* 2 (2015), [http://www.demos.org/sites/default/files/publications/Mark-Debt%20divide%20Final%20\(SF\).pdf](http://www.demos.org/sites/default/files/publications/Mark-Debt%20divide%20Final%20(SF).pdf) [<https://perma.cc/69YC-2N57>].

9. Nichols & Anthony, *supra* note 7. The Biden Administration’s plan to cancel up to \$20,000 of student debt will positively affect those numbers. See *Fact Sheet: President Biden Announces Student Loan Relief for Borrowers Who Need It Most*, White House (Aug. 24, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/24/fact-sheet-president-biden->

times the rate of White students<sup>10</sup> and lag between ten and twenty percentage points behind their White and Asian peers in completing a degree.<sup>11</sup> First-generation students persist through college to graduation at lower rates than their non-first generation peers, even when controlling for socioeconomic status, institution type, and attendance status.<sup>12</sup> And the COVID-19 pandemic has seen Latino and Black student retention drop disproportionately to their White and Asian peers.<sup>13</sup>

Scholars have tried to better understand the drivers for the racial and ethnic college completion gap. When looking at the Latino college completion gap, for example, researchers have identified significant obstacles: low family income, inadequate preschool opportunities, lagging K-12 public educational systems, increasing college costs, lack of college-readiness skills, lack of a sense of belonging or support at their institution, the need to work full time, and disproportionately higher enrollment in postsecondary institutions that record low graduation rates.<sup>14</sup> Consuelo Arbona and Amaury Nora offer a useful three-classification framework for categorizing the identified barriers to Latino college completion: (1) precollege factors, including academic resources and social capital; (2) institution-related factors, including academic performance, academic integration, enrollment status, and continuity of enrollment; and (3) environmental factors, including family

announces-student-loan-relief-for-borrowers-who-need-it-most/ [https://perma.cc/Q9UB-2QS7] (pointing to “an Urban Institute study [finding] that debt forgiveness programs targeting those who received Pell Grants while in college will advance racial equity” (citing Erica Blom, *A More Targeted Approach to Student Loan Forgiveness*, URB. WIRE (Apr. 12, 2021), <https://www.urban.org/urban-wire/more-targeted-approach-student-loan-forgiveness> [https://perma.cc/3ZLA-FHAU])). The proposed loan cancellation program, however, is currently facing legal challenges. *See, e.g.*, Danielle Douglas-Gabriel, *GOP-Led States Urge Judge to Block Biden Student Debt Relief Plan*, WASH. POST (Oct. 12, 2022, 5:53 PM), <https://www.washingtonpost.com/education/2022/10/12/student-loan-forgiveness-republican-lawsuit/> [https://perma.cc/R8PP-VB4Z] (recognizing that “[t]he Biden administration is facing several lawsuits over its student debt cancellation policy”).

10. Nichols & Anthony, *supra* note 7.

11. *Indicator 23: Postsecondary Graduation Rates*, NAT’L CTR. EDUC. STAT. (Feb. 2019), [https://nces.ed.gov/programs/raceindicators/indicator\\_red.asp](https://nces.ed.gov/programs/raceindicators/indicator_red.asp) [https://perma.cc/Z2YJ-FXED]; *see also* Andrew Howard Nichols, *A Look at Latino Student Success*, EDUC. TR. (Dec. 14, 2017), <https://edtrust.org/resource/look-latino-student-success/> [https://perma.cc/5S6L-ENA9].

12. ANNE-MARIE NUNEZ & STEPHANIE CUCCARO-ALAMIN, NAT’L CTR. EDUC. STAT., *FIRST-GENERATION STUDENTS: UNDERGRADUATES WHOSE PARENTS NEVER ENROLLED IN POSTSECONDARY EDUCATION* 52–53 (1998), <https://nces.ed.gov/pubs98/98082.pdf> [https://perma.cc/L67N-QCNA].

13. *EXCELENCIA IN EDUC., HOW HAS LATINO AND BLACK STUDENTS’ RETENTION BEEN AFFECTED BY THE COVID-19 PANDEMIC?* (2021), <https://www.edexcelencia.org/factsheet/COVID-affect-retention-Latino-Black-students-pdf> [https://perma.cc/CPT6-LNHY].

14. COLL. BD. ADVOC. & POL’Y CTR., *THE COLLEGE COMPLETION AGENDA STATE POLICY GUIDE: LATINO EDITION* 5–7 (2011); Nichols & Anthony, *supra* note 7, at 1; Joseph A. Kitchen & Michael S. Williams, *Thwarting the Temptation to Leave College: An Examination of Engagement’s Impact on College Sense of Belonging Among Black and Latinx Students*, 4 J. STUDY POSTSECONDARY & TERTIARY EDUC., 2009, at 67, 67; Victor B. Saenz & Luis Ponjuan, *The Vanishing Latino Male in Higher Education*, 8 J. HISP. HIGHER EDUC. 54 (2009); Terrell L. Strayhorn, *When Race and Gender Collide: Social and Cultural Capital’s Influence on the Academic Achievement of African American and Latino Males*, 33 REV. HIGHER EDUC. 307 (2010).

responsibilities and work responsibilities while enrolled in school.<sup>15</sup> Scholars studying Black college students have made similar findings<sup>16</sup> and created similar typologies.<sup>17</sup> A new research study undertaken by this Author adds to this literature by highlighting an underappreciated barrier—transportation—in higher education equity.<sup>18</sup>

This Article offers two primary contributions to legal and non-legal scholarship. The first is to clearly identify how transportation is one of the critical supports that college students need to succeed. Relatedly, it exposes that transportation barriers disproportionately affect students of color. In fact, reliable transportation is a support that, when eliminated, negatively affects multiple other facets of life like academics, family responsibilities, and work opportunities.<sup>19</sup>

This insight leads to the Article's second contribution: exposing how higher education law and policy often exacerbate systemic transportation barriers, reinforcing transportation's negative effects on students of color. This Article builds on recent work of a small cohort of legal academics studying the relationship between transportation and equity.<sup>20</sup> More specifically, it traces the ways that higher education law and policy intersect with automobile supremacy, transportation

15. See Consuelo Arbona & Armaury Nora, *The Influence of Academic and Environmental Factors on Hispanic College Degree Attainment*, 30 REV. HIGHER EDUC. 247, 251–52 (2007).

16. See, e.g., Erik M. Hines, Joseph N. Cooper & Michael Corral, *Overcoming the Odds: First-Generation Black and Latino Male Collegians' Perspectives on Pre-College Barriers and Facilitators*, 13 J. MULTICULTURAL EDUC. 51 (2019) (qualitative study investigating pre-college barriers); DESHAWN PRESTON, SOUTHERN EDUC. FOUND., UNTOLD BARRIERS FOR BLACK STUDENTS IN HIGHER EDUCATION: PLACING RACE AT THE CENTER OF DEVELOPMENTAL EDUCATION (2017), <https://files.eric.ed.gov/fulltext/ED585873.pdf> [<https://perma.cc/24AY-K7K5>] (looking at remedial higher education and lagging P–12 school as barriers to Black postsecondary success); Shewanna Monique Talley, *First-Generation African American College Students: A Qualitative Analysis of Barriers that Impact Graduation* (Jan. 2020) (D.E.L. dissertation, University of Charleston) (ProQuest).

17. See, e.g., Stella M. Flores, Toby J. Park & Dominique J. Baker, *The Racial College Completion Gap: Evidence from Texas*, 88 J. HIGHER EDUC. 894 (2017) (looking at pre-college and college barriers in college completion gaps between Blacks and Whites and Latinos and Whites).

18. See *infra* Part II.

19. KATE ELENGOLD, JESS DORRANCE, AMANDA MARTINEZ, PATRICIA FOXEN & PAUL MIHAS, *DREAMS INTERRUPTED: A MIXED-METHODS RESEARCH PROJECT EXPLORING LATINO COLLEGE COMPLETION 2* (2021) [hereinafter *DREAMS INTERRUPTED*], <https://law.unc.edu/wp-content/uploads/2021/09/Dreams-Interrupted-Latino-College-Report.pdf> [<https://perma.cc/5ZB4-WRVZ>].

20. See, e.g., Gregory H. Shill, *Should Law Subsidize Driving?*, 95 N.Y.U. L. REV. 498 (2020); Deborah N. Archer, *Transportation Policy and the Underdevelopment of Black Communities*, 106 IOWA L. REV. 2125 (2021) [hereinafter *Transportation Policy*]; Deborah N. Archer, “White Men’s Roads Through Black Men’s Homes”: *Advancing Racial Equity Through Highway Reconstruction*, 73 VAND. L. REV. 1259 (2020) [hereinafter *White Men’s Roads*]; Pamela Foohey, Robert M. Lawless & Deborah Thorne, *Driven to Bankruptcy*, 55 WAKE FOREST L. REV. 287 (2020) [hereinafter *Driven to Bankruptcy*]; Pamela Foohey, *Bursting the Auto Loan Bubble in the Wake of COVID-19*, 106 IOWA L. REV. 2215 (2021) [hereinafter *Bursting the Auto Loan Bubble*]; Sarah Schindler, *Architectural Exclusion: Discrimination and Segregation Through Physical Design of the Public Environment*, 124 YALE L.J. 1934 (2015); Adam J. Levitin, *The Fast and the Usurious: Putting the Brakes on Auto Lending Abuses*, 108 GEO. L.J. 1257 (2020); Omari Scott Simmons, *Urban Removal: Reshaping Urban Landscapes Through a Responsive Communitarian Lens*, 29 CORNELL J.L. & PUB. POL’Y 885 (2020).

racism, and automobile sales and lending discrimination. By drawing attention to these connections, this Article not only bridges the gap between transportation law and higher education law but explains how those intersections double down on transportation law's disproportionately negative effects on people of color.

These contributions are grounded in rich interdisciplinary literature. They are also strengthened by data that arose from an original multi-year, mixed-methods research study conducted by this Author testing salient explanatory factors for the college completion gap between Latinos and non-Latinos.<sup>21</sup> The study, which resulted in two data-driven publications—*Debt, Doubt, and Dreams: Understanding the Latino College Completion Gap*<sup>22</sup> and *Dreams Interrupted: A Mixed-Methods Research Project Exploring Latino College Completion*<sup>23</sup>—tested twenty barriers to college completion, teasing out which barriers disparately affected Latino students. Focused on testing the conventional wisdom of Latino debt aversion as a determining factor in college completion, a surprising finding surfaced: transportation was a critical barrier in explaining the Latino college completion gap.<sup>24</sup> Transportation was more important, in fact, than debt aversion.<sup>25</sup>

By contextualizing the results of that study in the current transportation law and policy scholarship, this Article adds important dimensions to scholarship focused on transportation and higher education. First, it shows how higher education equity is an important space in which structural transportation barriers affect outcomes.<sup>26</sup> Second, it fills a gap in scholars' and policymakers' discourse about racial and ethnic equity in what has long been thought to be one of the most important pillars of social and financial mobility in the United States: higher education.<sup>27</sup> Finally, by focusing its attention on how higher education law directly

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21. See *infra* Part II. The author was the primary investigator on the research project and the lead author on the two reports that resulted from the data.

22. KATE SABLOSKY ELENGOLD, JESS DORRANCE, ROBERT AGANS, AMANDA MARTINEZ & PATRICIA FOXEN, *DEBT, DOUBT, AND DREAMS: UNDERSTANDING THE LATINO COLLEGE COMPLETION GAP* 26 (2020) [hereinafter *DEBT, DOUBT, AND DREAMS*], <https://law.unc.edu/wp-content/uploads/2020/11/Debt-Doubt-and-Dreams-Report.pdf> [<https://perma.cc/EYR7-TYJZ>].

23. *DREAMS INTERRUPTED*, *supra* note 19.

24. See *infra* notes 95–102 for a more complete description of how this project arose.

25. See *infra* notes 95–102.

26. Higher education is not the only area of law and social policy that is affected by transportation barriers. David A. Hoffman and Anton Strezhnev, for example, show how a long commute to the courthouse increases the possibility that a renter will default in an eviction action, leading to loss of a rental home. DAVID A. HOFFMAN & ANTON STREZHNEV, *LONGER TRIPS TO COURT CAUSE EVICTIONS* (2022), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4130696](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4130696) [<https://perma.cc/7FX8-42KW>]. Nor is Hoffman and Strezhnev's study unrelated to the studies underlying this Article. It is nearly impossible to understand transportation's effect on higher education without discussing and accounting for housing and housing policy.

27. Discussion of civil rights has also generally been excluded from conversations about transportation generally. See, e.g., LEADERSHIP CONF. EDUC. FUND, *WHERE WE NEED TO GO: A CIVIL RIGHTS ROADMAP FOR TRANSPORTATION EQUITY 1* (2011), <http://www.protectcivilrights.org/pdf/docs/transportation/52846576-Where-We-Need-to-Go-A-Civil-Rights-Roadmap-for-Transportation-Equity.pdf> [<https://perma.cc/3W5M-P54S>] (“Transportation and mobility play key roles in the

affects transportation barriers for students, it offers concrete ideas for education policymakers to adjust education law and policy to increase transportation access, and thus, educational equity.

A well-known children’s wooden block game—Jenga® Classic—offers an apt metaphor to (1) explore how barriers to college completion intersect and (2) show how transportation difficulties act as a particularly difficult barrier for students of color to overcome.<sup>28</sup> Jenga® Classic is a game created by Leslie Scott comprised of 54 wooden blocks and currently sold, along with several newer iterations, by Hasbro®.<sup>29</sup> To set up the game, the players stack the blocks in levels of three, alternating the position of the levels by turning the blocks 90 degrees.<sup>30</sup> It takes

struggle for civil rights and equal opportunity. Historically, issues related to transportation were integral to the civil rights movement—embodied in the Montgomery Bus Boycott and the Freedom Ride—yet, the civil rights implications of transportation policies have been largely ignored until recent years.”).

28. Using a metaphor is more than rhetorical flourish. Rather, scholars have found that using metaphors can help people reason differently and develop solutions to real-world problems. See Paul H. Thibodeau & Lera Boroditsky, *Metaphors We Think With: The Role of Metaphor in Reasoning*, PLoS ONE, Feb. 2011, at 1, 9, <https://doi.org/10.1371/journal.pone.0016782> [<https://perma.cc/F46S-CABT>]; see also John M. Conley & Cynthia A. Williams, *Engage, Embed, and Embellish: Theory Versus Practice in the Corporate Social Responsibility Movement*, 31 J. CORP. L. 1, 24, 36 (2005) (analyzing the growing corporate social responsibility movement through ethnographic and linguistic frames); John M. Conley, *Can You Talk like a Lawyer and Still Think like a Human Being? Mertz’s The Language of Law School*, 34 LAW & SOC. INQUIRY 983, 989–90 (2009) (noting in a book review that sociolinguistic literature “show[s] how participants in everyday conversation construct stories, tell about their troubles, or respond to requests, as well as . . . document[s] the linguistics of such institutional settings as the medical clinic, the lawyer’s office, and even the jury room”); cf. Sharon McMahan, *Creating a Culture of Informal Mentoring at Community Colleges: Conditions that Strengthen and Weaken Relationships and Students’ Structural Resiliency* 112–13 (2020) (Ph.D. dissertation, Old Dominion University) (ProQuest) (using Jenga as a metaphor to consider students’ positive and negative interpersonal interactions and personal support system in assessing community college students’ resiliency).

29. *About*, JENGA, <https://www.jenga.com/about.php> [<https://perma.cc/4VTC-UK2N>] (last visited Jan. 24, 2023). There are a number of other games that resemble Jenga®, and other legal articles have used Jenga as a metaphor to explain complex structures. See, e.g., Emily Knight, Note, *Blockchain Jenga: The Challenges of Blockchain Discovery and Admissibility Under the Federal Rules*, 48 HOFSTRA L. REV. 519, 560–61 (2019) (using the metaphor of three simultaneous Jenga games to explain cross-chain technology); Kathryn V. Lindley, Note, *Will the Tower Topple? The Future of Morality as a Legitimate State Interest Argument in Homosexual Legal Issues*, 53 DRAKE L. REV. 1063, 1064–65 (2005) (arguing that the Supreme Court decision in *Lawrence v. Texas*, 539 U.S. 558 (2003), removed a key piece of the Jenga tower of LGBTQ jurisprudence); Jeffrey A. Van Detta, “*For the Love of God! Open This Door!*”: *Individual Rights Versus Public Safety Under the “Direct Threat” Standard of the Americans with Disabilities Act After Three Decades of Litigation*, 6 BELMONT L. REV. 147, 182–83 (2019) (arguing that, like in the game of Jenga, a key block was removed from the understanding about “direct threat” determinations in *EEOC v. Beverage Distribs. Co.*, 780 F.3d 1018 (10th Cir. 2015)). Even Supreme Court Chief Justice John Roberts borrowed the Jenga metaphor during oral argument in *NCAA v. Alston*. Transcript of Oral Argument at 44, *Nat’l Collegiate Athletic Ass’n v. Alston*, 141 S. Ct. 2141 (2021) (Nos. 20-512, 20-520) (“But then you go on to another rule and fiddle with that in the same way and another one and another one, and—and it’s like a game of Jenga. You’ve got this nice solid block that protects the sort of product the schools want to provide, and you pull out one log and then another and everything’s fine, then another and another and all of a sudden the whole thing’s come – comes crashing down.”).

30. JENGA, *supra* note 29.



patient and careful work, or the assistance of the loading tray,<sup>31</sup> to create a strong tower. The rules and goals of the game are simple. Players alternate turns taking one wood block from any level in the tower and placing that block on top of the tower, continuing to build the tower upward.<sup>32</sup> The person who removes the wood block that ultimately topples the tower loses the game.<sup>33</sup> Players can then rebuild the tower to start a new game.

Accessing, undertaking, and completing a higher education degree is much like building a Jenga® tower. For those who have college-educated parents, money, cultural and social capital, and/or excellent academic records, their college Jenga® tower is well-built and structurally sound.<sup>34</sup> It is as if they begin with and even retain the loading tray that makes the blocks straighter, stronger, and less likely to topple.<sup>35</sup> For students of color, who are disproportionately first-generation, low-income, and from under-resourced or failing school systems, their college Jenga® tower begins on shakier ground.<sup>36</sup>

Now imagine that every wood block in a college Jenga® tower is a different support necessary to college access, success, and completion. For example, one block is family support. One block is cultural capital. One block is financial support. One block is mental health. One block is a college scholarship, and another is the ability to graduate debt-free. One block is academic support, another is food security, and yet another is stable housing. Each time a student faces a barrier that makes it more difficult for the student to succeed, the related support block is removed and placed on top, and the tower becomes less stable.

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31. *Id.*

32. *Id.*

33. *Id.*

34. See Rachel F. Moran, *City on A Hill: The Democratic Promise of Higher Education*, 7 U.C. IRVINE L. REV. 73, 101–02 (2017) (“[S]tudents with weak scholastic indicators from high-income backgrounds are now slightly more likely to finish college than students with strong scholastic indicators from low-income backgrounds.” (first citing SUZANNE METTLER, *DEGREES OF INEQUALITY: HOW THE POLITICS OF HIGHER EDUCATION SABOTAGED THE AMERICAN DREAM* 26 (2014); and then citing Susan Dynarski, *For the Poor, the Graduation Gap Is Even Wider than the Enrollment Gap*, N.Y. TIMES, June 2, 2015, at A3)); Anthony Richard Unverferth, Carolyn Talbert-Johnson & Treavor Bogard, *Perceived Barriers for First-Generation Students: Reforms to Level the Terrain*, 21 INT’L J. EDUC. REFORM 238, 240 (2012) (“Basically due to their background characteristics, [First-Generation students] are at a distinct disadvantage when compared to their mainstream peers.”).

35. See *supra* note 20; see also Vernon D. Gibbs II, *Jenga Game an Adapt Metaphor for Handling Pandemic Schooling*, CITY DADS GRP. (Sept. 2, 2020), <https://citydadsgroup.com/jenga-pandemic-school-preparation/> [<https://perma.cc/ED3F-5WD6>] (using the Jenga metaphor to describe pandemic parenting: “[I]f you have ever played Jenga, you know set up can be the key to a good game. If you set up the blocks nice and straight the game can go on for a very long time with proper moves and strategy. Set them up misaligned and uneven, the tower will fall after only a few rounds. But no matter what you do, no matter how well you plan, you cannot prepare for a stray foot that takes down the tower.”).

36. See Moran, *supra* note 34 (pointing to studies showing that Latino and African American males are so far behind their White and Asian peers as to suggest that higher education is no longer a path to mobility, but rather reinforcement of the current American caste system).

It is never clear which block is going to ultimately tumble the tower, and it might be different for different students. In other words, there is not one specific determinant that makes it more difficult for students to complete college. That complexity makes it impossible for policymakers and scholars interested in higher education equity to pinpoint which block will topple the college Jenga® tower. Rather, data shows that there is no single causal factor.<sup>37</sup>

What is clear, however, is that data and literature show that certain barriers disproportionately affect students of color.<sup>38</sup> What is also clear is that certain supports, when removed, affect multiple other supports.<sup>39</sup> Transportation is one of the supports that cuts across many (if not all) of the other wood blocks of the college Jenga® tower. When transportation is negatively affected—because of unreliable personal transportation, lack of access to public transportation, prohibitive cost, inconvenient scheduling, or proximity to school, housing, or work<sup>40</sup>—it may take out a number of other support blocks. For example, a student whose car breaks down has no way to get to school or to work.<sup>41</sup> Another student who worries about the time it will take to get to her after-school job on public transit has trouble concentrating in class and falls behind.<sup>42</sup> And another student who has to care for her younger siblings is unable to both attend classes 45 minutes away and pick up her three siblings from school.<sup>43</sup>

Transportation has particularly strong repercussions for college success and completion for students who begin with a less stable tower.<sup>44</sup> Therefore, it is critical to pay attention not only to the intersection of transportation and equity, but also to the way that higher education law and policy can either exacerbate or mitigate the negative effects of transportation disparities. Because transportation inequities disproportionately burden people of color, higher education's inability to overcome transportation disparities exacerbates racial and ethnic inequities.

This Article proceeds in five parts. Part I introduces the reader to Michelle, a real-world example<sup>45</sup> of someone navigating the college Jenga® tower, which

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37. See *supra* notes 13–16; see also *infra* Section II.C.

38. See *infra* notes 14–18.

39. DEBT, DOUBT, AND DREAMS, *supra* note 22.

40. See Dalí Jiménez & Jonathan D. Glater, *Student Debt Is a Civil Rights Issue: The Case for Debt Relief and Higher Education Reform*, 55 HARV. C.R.-C.L. L. REV. 131 (2020).

41. Zoom Audio Interview by Jess Dorrance with Michelle (Dec. 20, 2020) (transcript on file with author).

42. Zoom Audio Interview by Jess Dorrance with Sofia (Jan. 5, 2021) (transcript on file with author).

43. Zoom Audio Interview with Doris (Dec. 29, 2021) (transcript on file with author).

44. See *supra* notes 23–25.

45. This information came from an interview with an individual who participated in the research study described *infra* Section II.A. See Interview with Michelle, *supra* note 41. Only the names and identifying information have been changed to protect the participant's privacy and comply with the requirements of U.N.C. Institutional Review Board. This is true for all interview participants cited herein.

ultimately crumbled because of transportation problems. Part II describes the study that precipitated this Article. It first sets out the study's aims and methods. It then describes the study's primary findings, including the surprising fact of transportation as a salient barrier useful in explaining the Latino/non-Latino college completion gap. Part III makes the normative case for why college success and completion matter, tracing the benefits of and barriers to higher education. It pays particular attention to the repercussions of our system of debt-financing college on students of color. Part IV introduces the reader to issues of critical importance in transportation law and policy—automobile supremacy, infrastructure and transportation racism, and car buying and lending—and shows how those legal frameworks disproportionately burden people of color. Part V explores if and how higher education law and policy interact with previously introduced areas of transportation law. It offers evidence and examples to argue that higher education's formal, detailed legal regulation and informal, structural legal scaffolding ignore or exacerbate transportation barriers and their negative effects on students of color. Part V also offers a glimmer of hope by detailing legal, policy, and practical solutions to limit or eliminate transportation law's negative effects on higher education equity, highlighting certain programs that can act as models or muses for solutions to this multifaceted problem.

#### I. MICHELLE'S COLLEGE JENGA® TOWER

Michelle is a 26-year-old Latina living in Florida.<sup>46</sup> A first-generation college student, Michelle began a graphic design associate's program at her local community college after high school.<sup>47</sup> She wanted to turn her love of art into a career. Michelle's parents encouraged her to consider college from a young age. She reflected, "My dad always drilled it into me, because being Hispanic, my grandfather came to this country from Cuba. And then my grandmother came from Guatemala. And then my parents basically said, since we didn't make it to college . . . that I needed to go."<sup>48</sup> Michelle viewed college as a way to change her entire family's trajectory. She thought about "how successful [she] could be, and [how she] could change [her] whole generation or [her] family around the success."<sup>49</sup> Unfortunately, Michelle encountered a significant number of barriers in her educational pursuits; she ultimately left her program after one and a half years.<sup>50</sup> Although she had intended to go back, as of this writing, she had not yet re-enrolled. Michelle left her college program with debt, but no degree.

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46. The facts in this Section were drawn directly from a professionally transcribed interview between Jess Dorrance, UNC researcher, and Michelle. Interview with Michelle, *supra* note 41, at 21.

47. *Id.* at 20, 2.

48. *Id.* at 1.

49. *Id.*

50. *Id.* at 5.

Michelle overcame a lot to build her college Jenga® tower. She came from an abusive home, described “unchecked mental health” issues, and came from a low-income immigrant family.<sup>51</sup> While Michelle’s parents encouraged her to pursue higher education, they did not have the financial or cultural capital to help her navigate it. Rather, Michelle felt “the pressure and guilt of just wanting to change things for [her family], because that’s why they came here to America []. And [] as a Latino person, that’s a big deal for . . . [m]aking them proud.”<sup>52</sup> To cover the cost of college, Michelle both worked part-time and applied for financial aid. Michelle worked hard to build her college Jenga® tower, but because of her pre-college circumstances, it started with an unstable foundation.

In addition to pre-college barriers, Michelle faced barriers along every other axis identified by Arbona and Nora.<sup>53</sup> Each support she lacked created stress or difficulty and destabilized the entire endeavor. For example, while she loved her community college, she did not get access to personal guidance or emotional support that would have buttressed her tower against the other barriers. Michelle explained, “[B]eing from my Latino family, and them growing up a little more poor, [] I just focused on work, and then school. Work and school. So I didn’t think like, oh, let me go to the guidance counselor to talk . . . . But when I walked into that office, . . . they left at 4:00 or 5:00, they left pretty early. So I was like, oh man, when I get off work and right between class . . . I would like to talk to someone . . . That would have helped me a lot. Just . . . stay in college.”<sup>54</sup>

Michelle also described a significant number of environmental barriers. She worked while in school, describing a schedule where she worked from 1:00 or 2:00 pm to 7:00 pm and then went to class. She noted, “Sometimes it was a late nighttime class . . . . So I literally had a few minutes. And thankfully the job was 15 minutes from school. So when I drove to school, then I had 30 minutes to eat or something, to do homework.”<sup>55</sup> In addition to the stress and difficulty of school, Michelle described stressors in her personal life, including a romantic break-up after suffering a miscarriage.<sup>56</sup>

Michelle also described the stress of borrowing money for her education when she had witnessed the devastation of debt in her own family and generally avoided borrowing. She explained, “Truthfully [borrowing money] does make me feel bad. I don’t have the money to pay for it. I do feel worse, especially coming from a poor family, I do feel bad.” But, at the same time, Michelle considered, “What’s more of a gain? College is a gain. So I thought, okay, I’ll be willing to owe money if . . . I can

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51. *Id.* at 15, 16.

52. *Id.* at 23.

53. *See supra* note 15.

54. Interview with Michelle, *supra* note 41, at 3.

55. *Id.* at 17.

56. *Id.* at 18–19.

get a better job. And then if I get the better job, I can pay the loans and have some extra money.”<sup>57</sup>

It was transportation, however, that Michelle identified as the barrier that, in tandem with other burdens, ultimately tumbled her tower. At one point in her college career, Michelle needed a particular class that was only offered at a campus 45 minutes away from her house. When her car broke down, Michelle found the commute impossible, and she could not get to and from the campus. In Michelle’s words,

[W]hen I took that [ ] class, I was like, yes I’ll be willing to do anything to go to school. There’s one class that was only available [at another other campus location]. So it was 45 minutes away, and with my bad car . . . . And probably if that one little thing didn’t happen, then I may have been motivated to take a few more classes before ending and closing it off . . . .<sup>58</sup>

As is clear from Michelle’s story, her transportation concerns made the rest of the complex path that she had to navigate to attend, pay for, and succeed in college just too hard. She recalled,

It was really difficult. But yeah, it was mainly the car issue. . . . [D]riving there, it was fine, until the car issues, that means money. I didn’t have enough money while working and plus I drove everywhere. I was driving to work then driving there, and then driving back home for a break. I remember taking two-minute naps.<sup>59</sup>

Had Michelle turned to public transportation, she would never have been able to get to her job, school, and home; she reported that the 25-minute driving commute to her original campus would have taken two and a half hours on the bus.<sup>60</sup> For Michelle, with all of the barriers she faced, it was her lack of access to a reliable car or effective public transportation that ultimately made it impossible for her to continue. Her Jenga<sup>®</sup> tower crumbled, and she dropped out of school. Although Michelle liked her education and hoped to return, she has not yet been able to restart.

## II. ORIGINAL MIXED-METHODS STUDY

Michelle told her story in the context of a multi-year, multi-phase research study I led in 2020–21<sup>61</sup> as part of a UNC research team, in collaboration with

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57. *Id.* at 14.

58. *Id.* at 11.

59. *Id.* at 12.

60. *Id.* at 23.

61. The research study was overseen and governed by the policies of the U.N.C. Institutional Review Board.

UnidosUS<sup>62</sup> and funded by Lumina Foundation.<sup>63</sup> The study was designed and funded to test and understand the effects of attitudes about student debt on the college completion gap between Latinos and non-Latinos in the United States.

Although the Latino population in the United States is young, growing, and increasingly enrolling in higher education,<sup>64</sup> large gaps in college completion rates remain, with at least a ten-percentage point gap between Whites and Latinos and a twenty-percentage point gap between Asians and Latinos.<sup>65</sup> While there are many factors to explain the completion gap,<sup>66</sup> this study focused its primary attention on one regularly cited reason: debt aversion.<sup>67</sup>

During the course of the inductive and deductive analysis, we discovered that the Latino respondents did disproportionately (and in a statistically significant way) exhibit debt aversion,<sup>68</sup> but that aversion was complicated and deeply connected to other barriers to completion.<sup>69</sup> The most salient factors in explaining the difference in the self-identified college completion barriers between Latinos and non-Latinos, however, were transportation barriers and cost of college.<sup>70</sup> This Part describes the study and its findings.

62. UnidosUS is the largest organization in the United States that fights for Latino equality. It was previously known as the National Council of La Raza. *Who We Are*, UNIDOSUS, <https://www.unidosus.org/about/who-we-are/> [<https://perma.cc/99E5-ASEJ>] (last visited Jan. 24, 2023).

63. The study was funded through a generous grant awarded by Lumina Foundation, an independent, private foundation in Indianapolis that is committed to making opportunities for learning beyond high school available to all. LUMINA FOUND., <https://www.luminafoundation.org/> [<https://perma.cc/RXQ2-TGP6>] (last visited Jan. 24, 2023).

64. Latinos exceed 18% of the national population and accounted for more than half of the domestic population growth in the decade between 2010 and 2019. *Quick Facts: United States*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/US/RHI725219> [<https://perma.cc/3S5W-6X7N>] (last visited Jan. 26, 2023); Luis Noe-Bustamante, Mark Hugo Lopez & Jens Manuel Krogstad, *U.S. Hispanic Population Surpassed 60 Million in 2019, but Growth Has Slowed*, PEW RSCH. CTR. (July 7, 2020), <https://www.pewresearch.org/fact-tank/2020/07/07/u-s-hispanic-population-surpassed-60-million-in-2019-but-growth-has-slowed/> [<https://perma.cc/7RN2-CDTZ>].

65. *Indicator 23*, *supra* note 11; *see also* Nichols, *supra* note 11.

66. *See supra* note 13.

67. ALISA F. CUNNINGHAM & DEBORAH A. SANTIAGO, *STUDENT AVERSION TO BORROWING: WHO BORROWS AND WHO DOESN'T* 8 (2008), <https://files.eric.ed.gov/fulltext/ED503684.pdf> [<https://perma.cc/ZE55-P9FQ>] (“[O]ne of the most persistent truisms about student financing of higher education is that Latinos in particular have a strong aversion, or ‘cultural reticence,’ to taking out loans.”); *see also supra* notes 13–16.

68. *See infra* notes 91–94.

69. While the debt aversion findings were significant and useful, they are the primary subject of a non-academic report, *see DREAMS INTERRUPTED*, *supra* note 19, and may be the subject of future academic writing. For this Article, I provide the background findings primarily for the context of exploring transportation inequities.

70. *See infra* notes 96–100.

*A. Aims and Methods*

The primary research question in the study asked: How do attitudes about debt affect post-secondary completion for Latino students?<sup>71</sup> We identified four primary aims of the research, each of which centered on the role of debt aversion in Latino college completion.<sup>72</sup> After a significant literature review<sup>73</sup> and interviews with program, policy, and scholarly experts,<sup>74</sup> we hypothesized that debt aversion is a greater barrier to college completion for Latinos than for non-Latinos and that debt aversion is integrally connected to other barriers to non-completion for Latino students.<sup>75</sup> We developed three phases to the research project to both test our hypotheses and follow the data to their natural conclusion. Each phase and its methods are briefly described below. For a full explanation of the methods and limitations, see Appendices A and B.

Phase One was primarily quantitative, based on survey data. Reliance on survey data to better understand the way the law works, operates, and affects populations is an accepted undertaking in legal academia.<sup>76</sup> Legal scholars have used survey data to, for example, understand how agencies interpret statutes and draft regulations,<sup>77</sup> compare users' and judges' understanding of cell phone surveillance

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71. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 13.

72. The aims were: (1) to test whether Latinos exhibit greater debt aversion in the context of education debt; (2) to better understand the relationship between debt aversion and college completion, with a particular eye toward differences between Latinos and non-Latinos; (3) to understand the salience of debt aversion as relative to other predictive barriers to college completion; and (4) to provide context and add complexity to the debt aversion narrative as applied to Latinos in higher education. *Id.* at 14.

73. *Id.* at 4–12 (detailing themes and findings in the literature).

74. *Id.* at 14.

75. *Id.*

76. Legal and non-legal academics have relied on quantitative data, including survey data, to better understand the complex issues created by, exacerbated by, and solved by legal schemes. *See* TERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, *THE FRAGILE MIDDLE CLASS: AMERICANS IN DEBT* (2000) (analyzing bankruptcy records, original survey data, and prior studies to better describe and understand the population that files for bankruptcy); Darian M. Ibrahim, *How Do Start-Ups Obtain Their Legal Services?*, 2012 WIS. L. REV. 333 (utilizing original survey data, collected online, to test hypotheses about how and why start-ups use in-house counsel and/or outside counsel); Emily Ryo, *Legal Attitudes of Immigrant Detainees*, 51 LAW & SOC'Y REV. 99 (2017) (using original survey data to better understand the attitudes of long-term immigrant detainees about their legal situation); Todd C. Peppers & Christopher Zorn, *Law Clerk Influence on Supreme Court Decision Making: An Empirical Assessment*, 58 DEPAUL L. REV. 51 (2008) (analyzing former Supreme Court law clerks' political ideology as related to the Justices' votes to determine law clerk influence using original survey data of 532 former clerks).

77. Christopher J. Walker, *Inside Agency Statutory Interpretation*, 67 STAN. L. REV. 999 (2015) (analyzing 128 of 411 fielded surveys to executive agency and independent agency officials).

techniques to challenge Fourth Amendment jurisprudence,<sup>78</sup> and better understand public perceptions of the Supreme Court's abortion jurisprudence.<sup>79</sup>

In this study, we developed and fielded a “College Completion Survey” to test and identify the most salient barriers to completion for Latinos as compared to non-Latinos.<sup>80</sup> The survey instrument was fielded to a panel of individuals who were aged 18–40 and had some college credits or experience, but no degree and were not currently enrolled.<sup>81</sup> We received a total of 1,507 usable survey responses, 35% of which were completed by individuals who identified as “Spanish, Hispanic, or Latinx.”<sup>82</sup> Seventy-five percent of the respondents identified as female.<sup>83</sup> We ran a series of statistical analyses, including various models.<sup>84</sup> Although the data was rich and instructive, the data, because we utilized a convenience-based online survey, is not nationally representative.<sup>85</sup>

Phase Two was primarily qualitative and incorporated what we learned in the survey phase.<sup>86</sup> “Qualitative research ‘is a broad umbrella term for research methodologies that describe and explain persons’ experiences, behav[ior]s, interactions and social contexts’ without relying on quantitative or statistical models.”<sup>87</sup> Like quantitative empirical analysis, legal scholars rely on qualitative studies to better understand the details and nuance in answering research

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78. Matthew Tokson, *Knowledge and Fourth Amendment Privacy*, 111 NW. U. L. REV. 139, 176 (2019) (surveying 810 adult cell phone users recruited through Amazon's Mechanical Turk service).

79. Tom R. Tyler & Gregory Mitchell, *Legitimacy and the Empowerment of Discretionary Legal Authority: The United States Supreme Court and Abortion Rights*, 43 DUKE L.J. 703, 752 (1994) (surveying a random sample of 502 individuals living in the San Francisco Bay area).

80. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 14. A copy of the survey instrument can be requested by contacting the author and primary investigator, Kate Sablosky Elengold, at [clengold@email.unc.edu](mailto:clengold@email.unc.edu). The survey instrument was developed in consultation with a survey expert, Dr. Robert Agans, Associate Professor of Biostatistics and Co-Director of the Carolina Survey Research Laboratory, *see Robert Agans, PhD*, U.N.C. GILLINGS SCH. GLOB. PUB. HEALTH: GILLINGS SCH. DIRECTORY, [https://sph.unc.edu/adv\\_profile/robert-agans-phd/](https://sph.unc.edu/adv_profile/robert-agans-phd/) [<https://perma.cc/LB2R-KU2F>] (last visited Jan. 26, 2023), and under the guidance of the Institutional Review Board of the University of North Carolina.

81. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 14. For a complete explanation of the methods and limitations of this study, see *id.* at app. A, *reprinted infra* Appendix A.

82. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 15. The data was collected, coded, and analyzed by Dr. Agans. *See supra* note 77.

83. *Id.* at 15. Although it is true that Latinas enter higher education at greater rates than Latinos, *see Saenz & Ponjuan, supra* note 14, that does not explain the stark gender disparity. This Article does not address the intersections of gender and ethnicity that are surely present in some of the findings. It is excluded in part because of limited space and in part because of limited data. Gender dynamics in college non-completion, especially as related to transportation barriers, should be the focus of additional study.

84. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 35–36.

85. For a complete explanation, see *infra* Appendix A.

86. DREAMS INTERRUPTED, *supra* note 19, at 3–4.

87. Michael D. Sousa, *Bankruptcy Stigma: A Socio-Legal Study*, 87 AM. BANKR. L.J. 435, 458 (2013) (quoting Ellie Fossey, Carol Harvey, Fiona Mcdermott & Larry Davidson, *Understanding and Evaluating Qualitative Research*, 36 AUSTL. & N.Z. J. PSYCHIATRY 717, 717 (2002)).



questions.<sup>88</sup> Beginning with a statistical data analysis of a larger sample and then applying the knowledge gained from the quantitative work to guide and direct the interviews is a recognized mixed-method process.<sup>89</sup>

For Phase Two, we interviewed twenty-four individuals who identified as Hispanic, Latino, Latina, or Latinx and who had originally completed our survey.<sup>90</sup> Using a semi-structured interview guide, we interviewed each participant for 30 to 45 minutes.<sup>91</sup> Participants were given pseudonyms to protect their privacy.<sup>92</sup> For the data coding, we began with a code book but utilized both inductive and deductive structural coding.<sup>93</sup> We analyzed the data by looking at single concept codes, to better understand how our participants approached financing their college education, barriers to completion, and debt aversion.<sup>94</sup> We also looked at how codes interacted with one another thematically, looking for co-occurrences.<sup>95</sup> Throughout, we used an inductive pragmatic analysis approach,<sup>96</sup> identifying and analyzing themes within and across codes. There was sufficient data to reach saturation on certain themes, but our sample was not sufficiently diverse in demographics to be able to break down the themes beyond a first or second cut.<sup>97</sup>

Phase Three was also qualitative and acted as a supplement to Phase Two.<sup>98</sup> We interviewed seven individuals from six organizations across the United States that primarily serve Latinos navigating college.<sup>99</sup> Using a semi-structured interview

88. See Elengold, *supra* note 3 (using original interview data to better understand students' attitudes about education debt); Sara Sternberg Greene, *The Bootstrap Trap*, 67 DUKE L.J. 233, 240 (2017) (using interview data to understand the experience of families receiving Temporary Assistance for Needy Families (TANF) funds); Pamela Foohey, *When Faith Falls Short: Bankruptcy Decisions of Churches*, 76 OHIO ST. L.J. 1319, 1340 (2015) (using interview data of religious leaders to understand whether and why their religious organizations filed for bankruptcy); Kathryn M. Young, *Understanding the Social and Cognitive Processes in Law School that Create Unhealthy Lawyers*, 89 FORDHAM L. REV. 2575, 2577 (2021) (using interviews to understand how first-year law students' mental health fares and changes).

89. JOHN W. CRESWELL & VICKI L. PLANO CLARK, *DESIGNING AND CONDUCTING MIXED METHODS RESEARCH* 5–6 (3d ed. 2018).

90. During the course of the interviews, we determined that three of the participants were not originally eligible for the survey. This, of course, raises questions about the quantitative findings. It also, however, says something interesting about who took the survey, how people view themselves, and the complicated nature of seeking a degree in multiple attempts. For a complete description of methods and limitations, see DREAMS INTERRUPTED, *supra* note 19, at app. B, reprinted *infra* Appendix B.

91. DREAMS INTERRUPTED, *supra* note 19, at 37.

92. *Id.* at 6 n.5.

93. See JOHNNY SALDAÑA, *THE CODING MANUAL FOR QUALITATIVE RESEARCHERS* 98–99 (3d ed. 2016). We entered and maintained the data using Dedoose software.

94. DREAMS INTERRUPTED, *supra* note 19, at 4.

95. *Id.* at 37.

96. See MAGGI SAVIN-BADEN & CLAIRE HOWELL MAJOR, *QUALITATIVE RESEARCH: THE ESSENTIAL GUIDE TO THEORY AND PRACTICE* 175 (2013).

97. For a complete explanation, see *infra* Appendix B.

98. DREAMS INTERRUPTED, *supra* note 19, at 4.

99. *Id.*

guide, we conducted individual one-hour virtual interviews.<sup>100</sup> After asking each participant to review the original quantitative report<sup>101</sup> and a two-page write-up of the themes that we were seeing in Phase Two,<sup>102</sup> we solicited responses and reactions to our findings. We also asked participants to reflect on how the COVID-19 pandemic affected, exacerbated, or changed barriers to higher education success in the populations they serve.<sup>103</sup> Because we interviewed participants with a previous relationship with UnidosUS, and because of the varied nature of higher education programming across the United States, the data is anecdotal and not representative.

### B. Findings

The primary finding in related reports<sup>104</sup> answers the original research questions: the results corroborated prior research suggesting that Latinos are more debt averse than non-Latinos.<sup>105</sup> In fact, across three different measures, we found that the Latinos in our sample exhibited greater aversion to debt than the non-Latinos in our sample.<sup>106</sup> We also found, however, that debt aversion “is complex and difficult to define, and it is only one in a web of circumstances and rationale that lead to the decision to take out a loan or drop out of school.”<sup>107</sup> Further research is necessary to better explore and understand how debt aversion complicates and interacts with other barriers to college completion.<sup>108</sup>

This Article, however, focuses on transportation barriers to college completion. Although transportation was not initially part of the original research questions or hypotheses, it arose inductively from the data. Interestingly, although

100. *Id.*

101. *Id.*

102. *Id.* The write-up is on file with the author.

103. *Id.*

104. DEBT, DOUBT, AND DREAMS, *supra* note 22; DREAMS INTERRUPTED, *supra* note 19.

105. CUNNINGHAM & SANTIAGO, *supra* note 67; Sara Goldrick-Rab & Robert Kelchen, *Making Sense of Loan Aversion: Evidence from Wisconsin*, in BRAD HERSHBEIN & KEVIN M. HOLLENBECK, STUDENT LOANS AND THE DYNAMICS OF DEBT 317 (2015) (presentation at University of Michigan Conference on Student Loans); THOMAS G. MORTENSON, ATTITUDES OF AMERICANS TOWARD BORROWING TO FINANCE EDUCATIONAL EXPENSES 1959–1983, at 14, 21 (1988); Angela Boatman, Brent J. Evans & Adela Soliz, *Understanding Loan Aversion in Education: Evidence from High School Seniors, Community College Students, and Adults*, 3 AERA OPEN, Jan.-Mar. 2017, at 1, 11; UNIDOSUS, FOLLOWING THEIR DREAMS IN AN INEQUITABLE SYSTEM: LATINO STUDENTS SHARE THEIR COLLEGE EXPERIENCE 24 (2020), [https://unidosus.org/wp-content/uploads/2021/07/unidosus\\_followingtheirdreams\\_lr.pdf](https://unidosus.org/wp-content/uploads/2021/07/unidosus_followingtheirdreams_lr.pdf) [<https://perma.cc/7JMK-JD9F>]; Susan Coleman, *Risk Tolerance and the Investment Behavior of Black and Hispanic Heads of Household*, 14 J. FIN. COUNSELING & PLAN. 43 (2003); Lucia F. Dunn & Ida A. Mirzaie, *Consumer Debt Stress, Changes in Household Debt, and the Great Recession*, 54 ECON. INQUIRY 201 (2016); Patti J. Fisher, *Differences in Credit Card Use Between White and Hispanic Households*, 27 J. FIN. COUNSELING & PLAN. 199 (2016).

106. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 18–20.

107. *Id.* at 20

108. The Author is undertaking some of that research and aims to further explore the subject. See DREAMS INTERRUPTED, *supra* note 19.

Latinos did exhibit heightened levels of debt aversion, those attitudes about debt were not the most salient barrier our research exposed in explaining the Latino/non-Latino college completion gap.<sup>109</sup> Other findings bubbled up from the data. First, we found that Latinos reported that they experienced cumulatively more barriers to completion—across pre-college, institutional, environmental, and financial barriers—than non-Latinos.<sup>110</sup> Drilling down, we found that Latino respondents reported greater barriers than non-Latinos in environmental barriers and financial barriers.<sup>111</sup> Drilling down even further, we found that the two most salient barriers to predict the difference in Latino and non-Latino college completion rates were (1) transportation barriers and (2) cost of college.<sup>112</sup> Latino respondents reported that transportation was a barrier to completion at a 19% higher rate than non-Latinos.<sup>113</sup> And transportation was tied directly to the cost of college. Of the nearly 800 respondents who answered that they left college because they could no longer afford school, Latinos reported financial stress caused by transportation more often than non-Latinos by seven percentage points.<sup>114</sup>

The empirical quantitative data told us that transportation barriers disproportionately affected Latinos in their path to college completion; the data did not tell us the kind, scope, or intensity of those barriers. The interviews provided that deeper understanding of the statistical data. In addition to digging into the relationship between debt aversion and college completion,<sup>115</sup> the interviews led to critical transportation findings and thematic insights. We discovered an overarching theme: “Transportation is often the single thread holding together a precarious balancing act that allows the student to attend school while juggling multiple other responsibilities. Because transportation cuts across responsibilities related to work, school, and home, when that thread is broken, everything can unravel.”<sup>116</sup>

The biggest transportation concern for the interview participants was lack of access to reliable transportation between home, school, and work.<sup>117</sup> Only one

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109. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 26.

110. *Id.* at 21 (t(1494)=-3.13, p=0.0019).

111. *Id.* at 22 ((t(1500)=-2.28, p=0.0229) (environmental); (t(1504)=-5.03, p<.0001) (financial)).

112. *Id.* at 22–23 ((t(935)=-4.33, p<.0001 (transportation); (t(1505)=-5.38, p<.0001) (cost of college)). We also created a model that “measured the predictive value of [] these barriers.” For modeling details, see *infra* Appendix A.

113. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 23.

114. *Id.* at 25.

115. For a more complete picture of those findings, please see DREAMS INTERRUPTED, *supra* note 19. Otherwise, the debt aversion findings are outside the scope of this paper and the Author will take them up in future work.

116. *Id.* at 19. College is not the only place where transportation barriers cause lives to unravel. For example, driver’s license suspensions can cause significant problems and also have a disparate racial impact. See William E. Crozier & Brandon L. Garrett, *Driven to Failure: An Empirical Analysis of Driver’s License Suspension in North Carolina*, 69 DUKE L.J. 1585, 1606 (2020) (finding that Black and Latinx North Carolinians were disproportionately likely to face a driver’s license suspension).

117. DREAMS INTERRUPTED, *supra* note 19, at 24–25.

participant lived on campus; the rest lived at home or with family.<sup>118</sup> Only one-quarter of our participants said that they had unlimited access to a car, but two-thirds of those described difficulties with the car, “including the cost of a loan, gas, and/or insurance and lengthy commutes.”<sup>119</sup> Many participants without cars relied on a variety of transportation methods, including carpools, rides, public transportation, and walking; most reported relying primarily on the bus.<sup>120</sup> Inconsistent and inefficient public transit exacerbated the students’ schedule difficulties, making it nearly impossible to take care of all of their competing responsibilities.<sup>121</sup> This lack of access to reliable transportation caused a range of barriers, both in kind and intensity, including problems related to cost, time, schedule, and stress.<sup>122</sup>

Michelle’s story—with transportation as a central barrier to college success and completion—was not unique. Jessica described “hav[ing] to run from work to the bus stop” to make it to class on time. She described how she juggled two jobs, school, and home responsibilities.<sup>123</sup> When asked whether transportation was a barrier to college completion, Jessica explained, “I was tired. I was super tired. I would get on the bus and I would want to just go to sleep. I would just keep riding the bus all the way back to my house.”<sup>124</sup> It is no wonder that Jessica was only able to complete one year toward her associates degree.

Doris’s experience was particularly heart-wrenching. Because of her mother’s work schedule, Doris was responsible for much of her younger siblings’ care, including transportation to and from different schools.<sup>125</sup> And because her mother could not answer calls during her workday, Doris was also the point of contact for her siblings.<sup>126</sup> When her younger brother was diagnosed with diabetes at the start of Doris’s college career, “he was pretty sick quite a bit of the time.”<sup>127</sup> When the school called her, Doris had to either find someone to pick him up or go pick him up herself.<sup>128</sup> Between her 45-minute commute to campus and a car that sporadically needed repair or would not start, Doris was unable to meet her many

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118. *Id.* at 23.

119. *Id.* at 20.

120. *Id.* Although it did not arise in our data, ride sharing is becoming increasingly popular, remains largely unregulated, and should be considered both in future study and in any potential solutions.

121. Zoom Audio Interview by Jess Dorrance with Chelsea (Mar. 1, 2021) (transcript on file with author) (“For instance where the last bus comes at 5:15, but your class gets out at 3:00 and so you’re sitting there for two hours waiting for the bus. Or you’re getting up two hours earlier to go to class because you have to run here and run there and do this and that.”).

122. DREAMS INTERRUPTED, *supra* note 19, at 20.

123. Zoom Audio Interview by Jess Dorrance with Jessica (Jan. 14, 2021) (transcript on file with author).

124. *Id.*

125. Interview with Doris, *supra* note 43.

126. DREAMS INTERRUPTED, *supra* note 19, at 22.

127. Interview with Doris, *supra* note 43.

128. *Id.*

responsibilities.<sup>129</sup> She explained that she left college “because I didn’t really know how I was going to pay for the college and just wanting to be closer . . . not closer to home but trying to be there for my siblings and make sure they’re actually really okay and not having to rely on someone else to go and pick them up.”<sup>130</sup> Sofia also described the way that transportation barriers had a “huge impact” on her inability to complete her degree because it cut across her many responsibilities.<sup>131</sup> Sofia’s desire to avoid taking on education loans meant that she had to work while she was in school.<sup>132</sup> And because she did not drive, Sofia relied on friends or public transportation. When a new job required that she rely on public transit, Sofia recalled the toll that it took on her and her ability to focus and succeed in school: “[T]hen it became too hard to juggle. I would be in class but I would be worried about, am I going to make it to work on time? Am I going to catch the train on time to make it to work? And then I wouldn’t be focused on the class.”<sup>133</sup> At least one in six of our participants reported commutes of 45 minutes or more between home and school.<sup>134</sup>

The participant interviews, corroborated by the key informant interviews<sup>135</sup> and supported by the empirical data,<sup>136</sup> show that many college students are juggling several competing responsibilities and demands, at home, at work, and at school. This is particularly true for certain demographics. Our study, for example, showed the disproportionate effect on Latinos.<sup>137</sup> Their college Jenga® tower is disproportionately tall and unstable. And when transportation is affected—by, for example, Michelle’s “crappy car” or Doris’s home responsibilities or Sofia’s new job—too many blocks become unsteady, and the tower comes tumbling down.

### C. An Important Note on the Study

As with any research study, the methods, sample, and analysis create certain limitations.<sup>138</sup> One notable limitation here arises from the sample surveyed and interviewed. Because the study focused on college completion, our entire sample

129. *Id.*

130. *Id.*

131. Interview by with Sofia, *supra* note 42.

132. *Id.*

133. *Id.*

134. *See* DREAMS INTERRUPTED, *supra* note 19, at 24.

135. Zoom Audio and Video Interview by Kate Elengold, Jess Dorrance & Amanda Martinez with Key Informant (Apr. 16, 2021) (transcript on file with author) (“So, I can see how a student may wake up early with intention of getting to class on time, but the bus may lag, the bus may not show up, it may be delayed, whatever the case may be, and then them not being able to get to class on time or not going at all. But also, if they even have a car, what kind of car do they have? Right? It may be an older car. It may not start one day. They may not have gas. So, there’s so many different things that can happen with transportation, and I definitely think that, for sure, it’s a big, big barrier.”).

136. *See supra* notes 88–89 and accompanying text.

137. *See generally* DEBT, DOUBT, AND DREAMS, *supra* note 22.

138. Those limitations are spelled out *infra* Appendices A, B.

consisted of individuals who lacked a postsecondary degree. The lack of completers in the sample makes it impossible to yield causal findings. In other words, we cannot know whether debt aversion or transportation empirically causes students generally or students of color specifically to drop out of college. Rather, the data relies on individuals' responses to questions about why they stopped college. The data, therefore, are limited to the differences between self-reported barriers to completion, identifying salient differences between Latinos and non-Latinos.

Although such a structure can certainly be deemed a limitation, the data are consistent with and support the robust body of interdisciplinary literature cited herein.<sup>139</sup> They suggest that there are several interconnected barriers that affect college completion; for Latinos, certain barriers appear to have more significance than for non-Latinos. In that way, these data support and provide complexity and richness to the primary empirical finding presented herein. The data corroborate higher education<sup>140</sup> and transportation<sup>141</sup> literature findings that certain college supports (*i.e.*, transportation) affect multiple other supports, particularly for students of color.

### III. HIGHER EDUCATION AS A PILLAR OF SOCIAL AND FINANCIAL MOBILITY

While there has been little empirical evidence like that presented in the study detailed in this Article, other scholars have made the connection between reliable affordable transportation and success in college.<sup>142</sup> One report describing discussions with higher education leaders found that “[a] common sentiment was that ‘transportation is the single biggest pain point’ for students, and that while ‘campus locations may be centrally located near public transportation, students may not be.’”<sup>143</sup> Another noted that community college students are “one flat tire from dropping out.”<sup>144</sup> Others have found that transportation burdens are unevenly distributed, weighing more heavily on students of color.<sup>145</sup> This Section explains

139. *See infra* Section III.B.

140. *See supra* notes 12–14.

141. *See infra* Part IV.

142. *See, e.g.*, DEREK V. PRICE & DREW CURTIS, OVERCOMING TRANSPORTATION BARRIERS TO IMPROVE POSTSECONDARY SUCCESS 4 (2018), <https://www.dvp-praxis.org/wp-content/uploads/2018/02/Kresge-Higher-Education-and-Transportation-Brief.pdf> [<https://perma.cc/X5R9-3R6J>].

143. *Id.*

144. MATTHEW CRESPI, ELLIE BRUECKER & ABIGAIL SELDIN, WAITING FOR THE BUS? TRANSIT INFRASTRUCTURE AT AMERICA'S COMMUNITY AND TECHNICAL COLLEGES 2 (2021), <https://static1.squarespace.com/static/5e76b752917b85615be14f05/t/6096d1b0cfa2d12331f4dfa2/1620496820982/SHSF-Public-Transit-Map-Brief.pdf> [<https://perma.cc/3DGF-P54B>].

145. U.S. DEP'T EDUC., ADVANCING DIVERSITY AND INCLUSION IN HIGHER EDUCATION: KEY DATA HIGHLIGHTS FOCUSING ON RACE AND ETHNICITY AND PROMISING PRACTICES 40-41 (2016) (recognizing that students of color disproportionately encounter challenges outside the classroom, including transportation barriers). Other studies have also connected transportation barriers to other vulnerable categories. For example, scholars have looked at the relationship between transportation and low-income students, PRICE & CURTIS, *supra* note 142, at 2 (“The concentration of low-income students in large cities, point to the issue of transportation as an important aspect of the college

why that matters. It looks at the benefits of higher education generally, while recognizing that the benefits are not evenly spread across the student population. By so doing, it sets the stage for understanding how two interacting structures—higher education and transportation—can either exacerbate or mitigate racial inequities.

#### *A. Benefits of Higher Education*

Former President Barack Obama wrote in *The Audacity of Hope*, “[t]hroughout our history, education has been at the heart of a bargain this nation makes with its citizens: If you work hard and take responsibility, you’ll have a chance for a better life.”<sup>146</sup> This idea—that education is the great equalizer, a tool of social and financial mobility—is widely accepted.<sup>147</sup> This Section details the evidence of the value of higher education—financially, socially, and for larger society.

Scholars have found time and again that, on average, there is a significant financial benefit to holding a college degree.<sup>148</sup> Researchers have found that “workers with a bachelor’s degree make 80 percent more than workers with no more than a high school diploma.”<sup>149</sup> This translates into almost one million dollars more over the course of a lifetime.<sup>150</sup> This kind of statistic—empirically measuring

completion agenda”), students with disabilities, Joseph W. Madaus, Meg Grigal & Carolyn Hughes, *Promoting Access to Postsecondary Education for Low-Income Students with Disabilities*, 37 CAREER DEV. & TRANSITION FOR EXCEPTIONAL INDIVIDUALS 50, 54 (2014) (“Students with disabilities may have additional disability-related expenses in college such as special equipment, personal care attendants, transportation, or medical expenses.”), and rural students, see Ashley A. Smith, *Finding a Ride*, INSIDE HIGHER ED (Sept. 15, 2016), <https://www.insidehighered.com/news/2016/09/15/community-colleges-negotiate-transportation-options-get-students-class> [<https://perma.cc/WU9A-BQQD>] (“On average rural students will travel 52 miles round-trip to attend college, said Randy Smith, president of the Rural Community College Alliance.”).

146. OBAMA, *supra* note 1.

147. See Elengold, *supra* note 3.

148. See generally WALTER W. MCMAHON, HIGHER LEARNING, GREATER GOOD: THE PRIVATE AND SOCIAL BENEFITS OF HIGHER EDUCATION (2009). The Georgetown Center on Education and the Workforce has also put out a series of papers recognizing the economic advantages to having a college degree. See, e.g., CARNEVALE, ROSE & CHEAH, *supra* note 2; ANTHONY P. CARNEVALE, BAN CHEAH & MARTIN VAN DER WERF, A FIRST TRY AT ROI: RANKING 4,500 COLLEGES (2019), [https://cew.georgetown.edu/wp-content/uploads/College\\_ROI.pdf](https://cew.georgetown.edu/wp-content/uploads/College_ROI.pdf) [<https://perma.cc/MV9X-SE6C>]; ANTHONY P. CARNEVALE, TAMARA JAYASUNDERA & BAN CHEAH, THE COLLEGE ADVANTAGE: WEATHERING THE ECONOMIC STORM (2014), <https://cew.georgetown.edu/wp-content/uploads/2014/11/CollegeAdvantage.FullReport.081512.pdf> [<https://perma.cc/P3KQ-6KQL>].

149. CARNEVALE, CHEAH & VAN DER WERF, *supra* note 148, at 1 (citing CARNEVALE, ROSE & CHEAH, *supra* note 2). But see BETH AKERS & MATTHEW M. CHINGOS, GAME OF LOANS: THE RHETORIC AND REALITY OF STUDENT DEBT 70 (2016) (stating that while the studies consistently show that college graduates earn more, on average, than those without college degrees, it is not necessarily because their earnings skyrocket; rather, it is “driven in large part by the declining earnings among workers without college degrees”); John R. Brooks, *Income-Driven Repayment and the Public Financing of Higher Education*, 104 GEO. L.J. 229, 249 (2016) (citing economists who have concluded that “investing in higher education has consistently been one of the best forms of investment around”).

150. CARNEVALE, ROSE & CHEAH, *supra* note 2, at 3.

the benefit of a college degree—has been found repeatedly, using a variety of methodologies.<sup>151</sup> In large part, that is because individuals need credentials to get jobs; the credentialization in the labor market is ubiquitous.<sup>152</sup> In the last decade, the United States economy added 11.5 million jobs for workers with credentials beyond high school, compared with 80,000 for those with a high school diploma or less.<sup>153</sup>

Financial gain is not the only individual benefit of higher education. Researchers have also pointed to non-financial benefits of higher education. In a study involving 65 in-depth interviews of former students, researchers found that, even where the participants were disappointed in the financial return on their college investment, “the great majority . . . [ ] found deep value in their education, when assessed in both financial and non-pecuniary terms.”<sup>154</sup> One participant explained why she still valued her education, even though it left her with onerous student debt:

I know that sounds so insane to even say that. But I mean I feel like I came so far from where I was that I’ve had a lot of experiences I’ve had, and yes, I have this debt looming over me, and I have a lot of anxiety about that, and that really sucks. But . . . I feel like I wouldn’t be where I am in my life, and I owe that to being able to go to school and do everything that I’ve done.<sup>155</sup>

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151. AKERS & CHINGOS, *supra* note 149, at 69–70 (citing multiple studies); *see also* Robert Kelchen, *Student Loans: A Brief History, the Current Landscape, and Impacts on Society*, in HIGHER EDUCATION AND SOCIETY 173, 191 (Joseph L. DeVitis & Pietro A. Sasso eds., 2016) (citing studies and concluding that “it is likely that the majority of students will benefit from attending college even after taking student loan debt into account”).

152. TRESSIE McMILLAN COTTOM, LOWER ED: THE TROUBLING RISE OF FOR-PROFIT COLLEGES IN THE NEW ECONOMY 38 (2017) (“Inequalities in how we work, exacerbated by social policies and legitimized by individualist notions of education as a consumer good, conspired to create the demand for a credential that would insure workers against bad jobs.”).

153. PRICE & CURTIS, *supra* note 142, at 1. College’s financial benefit is not limited to four-year bachelor’s degrees and advanced degrees. Rather, depending on the area of study, associate degrees and certificates can also lead to lucrative careers. ANTHONY P. CARNEVALE, TANYA I. GARCIA, NEIL RIDLEY & MICHAEL C. QUINN, THE OVERLOOKED VALUE OF CERTIFICATES AND ASSOCIATE’S DEGREES: WHAT STUDENTS NEED TO KNOW BEFORE THEY GO TO COLLEGE 6 (2020), <https://cew.georgetown.edu/cew-reports/subba/> [<https://perma.cc/G6JD-F3WQ>] (finding that “engineering technologies and health are among the top-earning associate’s degrees in every state”). These programs cannot be overlooked; colleges award approximately two million certificates and associates degrees every year and about half of undergraduate students are enrolled in such programs. *Id.* at 2, 5.

154. KATE SABLOSKY ELENGOLD, JESS DORRANCE, JULIA BARNARD & DAVID ANSONG, WAS IT WORTH IT: THE COMPLEXITIES AND CONTRADICTION IN ASSESSING THE VALUE OF HIGHER EDUCATION 2 (2019), [https://communitycapital.unc.edu/wp-content/uploads/sites/340/2019/04/studentdebtbrief2\\_economic-impact\\_final.pdf](https://communitycapital.unc.edu/wp-content/uploads/sites/340/2019/04/studentdebtbrief2_economic-impact_final.pdf) [<https://perma.cc/V5NT-7KQW>].

155. *Id.* at 5.



The recent Postsecondary Value Commission also recognized the non-pecuniary benefits that individuals and their families reap from access to higher education.<sup>156</sup>

Nor are the benefits of higher education limited to individuals and their families. Rather, higher education has long been viewed as a mechanism for “fostering a healthier, more democratic society.”<sup>157</sup> There is a recognized normative claim that higher education has benefits for democratic health.<sup>158</sup> In *Grutter v. Bollinger*, the Supreme Court itself recognized that the University of Michigan Law School had a compelling state interest in student body diversity.<sup>159</sup> In making such a determination, the Court recognized the educational and economic benefits of a diverse learning environment.<sup>160</sup> Specifically, the Court cited Amicus Briefs filed by 3M and General Motors, which recognized the educational benefits in a diverse higher education setting because “the skills needed in today’s increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints.”<sup>161</sup> The Court went on to give voice to the concept of education as a touchstone for democracy: “We have repeatedly acknowledged the overriding importance of preparing students for work and citizenship, describing education as pivotal to ‘sustaining our political and cultural heritage’ with a fundamental role in maintaining the fabric of society.”<sup>162</sup> When viewed in the aggregate, across students, higher education is widely recognized as beneficial to individuals, families, communities, and the nation.

### B. Inequalities in Higher Education

Yet all of the average financial and social benefits are exactly that—averages. Higher education’s benefits are disparately experienced across lines of race, ethnicity, socioeconomic status, and gender.<sup>163</sup> Although there is recognition that institutions of higher education have the power to increase opportunities for underrepresented minorities and act as a launchpad to social and financial

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156. POSTSECONDARY VALUE COMM’N, *EQUITABLE VALUE: PROMOTING ECONOMIC MOBILITY AND SOCIAL JUSTICE THROUGH POSTSECONDARY EDUCATION* 9 (2021), <https://www.postsecondaryvalue.org/wp-content/uploads/2021/05/PVC-Executive-Summary-FINAL.pdf> [<https://perma.cc/F7LX-FJS5>].

157. *Id.* at 1.

158. Jonathan D. Glater, *The Other Big Test: Why Congress Should Allow College Students to Borrow More Through Federal Aid Programs*, 14 N.Y.U. J. LEGIS. & PUB. POL’Y 11, 16–17 (2011) (arguing that Congress should authorize federal loans for students that pay the entire cost of college).

159. *Grutter v. Bollinger*, 539 U.S. 306, 328 (2003).

160. *Id.* at 330–32.

161. *Id.* at 330.

162. *Id.* at 331 (citing *Plyler v. Doe*, 457 U.S. 202, 221 (1982)).

163. *EQUITABLE VALUE*, *supra* note 156 at 9.

mobility,<sup>164</sup> research shows that the benefits of higher education are not evenly distributed.<sup>165</sup> The disparities arise in how students pay for college, access elite institutions, and the value that the degree is given in the labor market. In fact, higher education can cause downward mobility for some individuals, if, for example, they leave college with debt, but no degree or graduate from poorly regarded institutions.<sup>166</sup>

The aggregate student debt load in the United States has reached a staggering \$1.75 trillion.<sup>167</sup> Although student loan payments are paused for the majority of federal borrowers until litigation related to the Biden Administration's attempt to cancel a portion of federal student loan debt is resolved,<sup>168</sup> prior to the pause, delinquency rates for student borrowers exceeded those for credit card debtors, mortgage holders, auto loan holders, and those with HE revolving loans.<sup>169</sup> Student loan delinquency and default come with pernicious consequences, limiting financial mobility and wealth development.<sup>170</sup> This is particularly true for those who take on student debt, but never graduate.<sup>171</sup> Although student loan debt affects forty-five

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164. *Id.* at 9–10 (“Students who complete credentials typically are more likely to be employed, earn higher wages, have greater access to retirement and healthcare plans, have better physical health, and engage in more civic-minded behaviors when compared with those who did not complete a credential.”).

165. *Id.* at 10.

166. Research shows that there is a downward economic trajectory for those who take on student debt but fail to graduate. See All Things Considered, *‘I’m Drowning’: Those Hit Hardest by Student Loan Debt Never Finished College*, NPR (July 18, 2019, 4:25 PM), <https://www.npr.org/2019/07/18/739451168/i-m-drowning-those-hit-hardest-by-student-loan-debt-never-finished-college> [<https://perma.cc/BH3H-5EH8>]. Further, studies have shown that graduates with certain for-profit institutions on their resumes are rejected from job opportunities at the same rate or higher as those with no college credentials. Rajeev Darolia, Cory Koedel, Paco Martorell, Katie Wilson & Francisco Perez-Arce, *Do Employers Prefer Workers Who Attend For-Profit Colleges? Evidence from a Field Experiment* (RAND Lab. & Population, Working Paper No. 1054, 2014) (finding that employers had no preference for a job applicant with a for-profit college on his resume any more than community college or no college at all).

167. *Consumer Credit Outstanding (Levels)*, BD. GOVERNORS FED. RSRV. SYS.: CONSUMER CREDIT—G.19 (Jan. 9, 2023), <https://www.federalreserve.gov/releases/g19/current/> [<https://perma.cc/9QFY-MV4E>].

168. *COVID-19 Emergency Relief and Federal Student Aid*, FED. STUDENT AID, <https://studentaid.gov/announcements-events/covid-19> [<https://perma.cc/T497-VGGR>] (last visited Jan. 27, 2023) (“If the debt relief program has not been implemented and the litigation has not been resolved by June 30, 2023—payments will resume 60 days after that.”).

169. RSCH. & STAT. GRP., FED. RSRV. BANK OF N.Y., *QUARTERLY REPORT ON HOUSEHOLD DEBT AND CREDIT 12–14* (2021), [https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc\\_2021q1.pdf](https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2021q1.pdf) [<https://perma.cc/F593-KTZV>].

170. Elengold, *supra* note 3 at 21 (noting that the Debt Collection Improvement Act of 1996 “gave the federal government unfettered rights to collect from student borrowers by ‘removing any federal or state statutory, regulatory, or administrative limitation on loan collections and authorizing the garnishment of wages and Social Security benefits’” (first citing C. Aaron LeMay & Robert C. Cloud, *Student Debt and the Future of Higher Education*, 34 J.C. & U.L. 79, 82 (2007); and then citing 20 U.S.C. § 1091a)).

171. DEBT, DOUBT, AND DREAMS, *supra* note 22, at 7 (“Borrowers who fail to complete their degrees stare down a compounded economic conundrum: student debt without the earning power associated with a degree.”).

million Americans,<sup>172</sup> it disproportionately burdens certain communities, both in the costs and consequences of the loans.

In this way, student debt is a civil rights issue.<sup>173</sup> Professor Daniela Kraiem looks to multiple studies to argue that unmanageable student debt “clusters at” certain variables, including kinds of loans and demographics of borrowers.<sup>174</sup> Nearly three out of every four Latino students take on debt to attend college, compared to two-thirds of White students.<sup>175</sup> And Latino borrowers find themselves in default on their loans almost twice as often as White borrowers.<sup>176</sup> This is in part because Latino students have lower completion rates and attend for-profit schools with poor graduation statistics at disproportionate rates.<sup>177</sup> Black students borrow more than White students<sup>178</sup> and default more often.<sup>179</sup> In fact, in analyzing credit panel data sets, researchers found that, in communities of color, the share of student borrowers in collections is seven percentage points higher than in majority-white communities.<sup>180</sup> In more than 100 counties, the difference rose to ten or more percentage points.<sup>181</sup> And because of the employment market, interest rates, and the need for graduate school, the difference between Black and White student loan debt only grows, more than threefold, after graduation.<sup>182</sup> For Native students,

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172. Danielle Douglas-Gabriel & John D. Harden, *The Faces of Student Debt*, WASH POST, (Apr. 6, 2021), <https://www.washingtonpost.com/education/2021/04/06/who-owes-student-debt/> [<https://perma.cc/Z4MD-GPM2>].

173. Jiménez & Glater, *supra* note 40.

174. Daniela Kraiem, *The Cost of Opportunity: Student Debt and Social Mobility*, 48 SUFFOLK U. L. REV. 689, 699–700 (2015).

175. STUDENT BORROWER PROT. CTR., DISPARATE DEBTS: HOW STUDENT LOANS DRIVE RACIAL INEQUALITY ACROSS AMERICAN CITIES 7 (2020), <https://protectborrowers.org/wp-content/uploads/2020/06/SBPC-Disparate-Debts.pdf> [<https://perma.cc/GL29-5FZ7>].

176. UNIDOSUS, LATINOS IN HIGHER EDUCATION: FINANCING AND STUDENT LOANS 4 (2019), [https://www.unidosus.org/wp-content/uploads/2021/07/financingstudent\\_loans\\_brief\\_32519.pdf](https://www.unidosus.org/wp-content/uploads/2021/07/financingstudent_loans_brief_32519.pdf) [<https://perma.cc/ZV8A-UY42>].

177. CTR. FOR RESPONSIBLE LENDING, QUICKSAND: BORROWERS OF COLOR AND THE STUDENT DEBT CRISIS 8 (2019), <https://www.responsiblelending.org/sites/default/files/nodes/files/research-publication/crl-quicksand-student-debt-crisis-jul2019.pdf> [<https://perma.cc/S4EX-G7UH>].

178. In 2016, Black college students borrowed for their education in approximately 85 percent of cases. *Id.* at 6. Native Hawaiians and other Pacific Islanders borrowed at even higher rates, close to 90 percent. *Id.*

179. *Id.* at 7 (“For African American borrowers who entered higher education in 2003-2004 as undergraduates, almost 49% had defaulted by 2016. Up to 70% of this cohort is projected to default by 2024.”).

180. Ben Kaufman, *New Data Show Alarming Racial Disparities for Student Loan Debt Collections*, STUDENT BORROWER PROT. CTR.: DOMINO (July 8, 2021), <https://protectborrowers.org/new-data-show-alarming-racial-disparities-for-student-loan-debt-collections/> [<https://perma.cc/7BP5-NUHC>] (analyzing credit panel data released by the Urban Institute).

181. *Id.*

182. JUDITH SCOTT-CLAYTON & JING LI, BLACK-WHITE DISPARITY IN STUDENT LOAN DEBT MORE THAN TRIPLES AFTER GRADUATION 3, (2016).

enrollment has dropped precipitously,<sup>183</sup> and incomplete and inconsistent data makes it difficult to understand the scope of barriers facing Native students.<sup>184</sup>

Just as minority students are more likely to attend for-profit and community colleges,<sup>185</sup> they are less likely to have access to elite institutions that boast huge return on investment.<sup>186</sup> A study out of Georgetown University found that White students are increasingly concentrated in the 468 most well-funded and selective four-year postsecondary institutions, while Black and Latino students are increasingly concentrated in the 3,250 least well-funded, open-access, two- and four-year institutions.<sup>187</sup>

Even with a degree, Black and Latino graduates face labor market discrimination that devalues their degree and makes it more difficult for them to repay their loans.<sup>188</sup> The overarching point is not complicated. Because college is primarily debt-financed, Black and Latino students, in particular, are disproportionately burdened on the way in and the way out. The student debt system, as sociologist Jason Houle asserts, is “both a cause and a consequence of racial inequality.”<sup>189</sup>

183. CRISTOBAL DE BREY, LAUREN MUSU & JOEL MCFARLAND, STATUS AND TRENDS IN THE EDUCATION OF RACIAL AND ETHNIC GROUPS 2018 126 (NCES 2019-038) (U.S. DEP’T OF EDUCATION, NAT’L CTR. FOR EDUC. STAT. 2019) (finding that, in 2016, Native enrollment in four-year degree-granting institutions dropped to 129,000, the lowest in sixteen years).

184. Christine A. Nelson, Amanda R. Tachine & Jameson D. Lopez, *Native Borrowers: Recognize It’s Our Land, and Honor the Treaties*, in LUMINA FOUND., CHANGING THE NARRATIVE ON STUDENT BORROWERS OF COLOR 16, 17–18 (2021), <https://www.luminafoundation.org/wp-content/uploads/2021/02/borrowers-of-color-2.pdf> [<https://perma.cc/GQL9-6DK6>].

185. See *Grutter v. Bollinger*, 539 U.S. 306 (2003).

186. See ANTHONY P. CARNEVALE & JEFF STROHL, SEPARATE AND UNEQUAL: HOW HIGHER EDUCATION REINFORCES THE INTERGENERATIONAL REPRODUCTION OF WHITE RACIAL PRIVILEGE 7 (2013), <https://vtechworks.lib.vt.edu/bitstream/handle/10919/83041/SeparateandUnequal.pdf?sequence=1&isAllowed=y> [<https://perma.cc/ZWW2-DVWQ>] (“The racial and ethnic stratification in educational opportunity entrenched in the nation’s K-12 education system has faithfully reproduced itself across the full range of American colleges and universities.”).

187. *Id.*

188. See, e.g., Kevin Woodson, *Race and Rapport: Homophily and Racial Disadvantage in Large Law Firms*, 83 FORDHAM L. REV. 2557, 2558 (2015) (discussing racial disparities in law firms); S. Michael Gaddis, *Discrimination in the Credential Society: An Audit Study of Race and College Selectivity in the Labor Market*, 93 SOC. FORCES 1451, 1464–71 (2015) (empirical evidence that Black graduates, even of prestigious college, face discrimination in the labor market); Leticia M. Saucedo, *The Browning of the American Workplace: Protecting Workers in Increasingly Latino-ized Occupations*, 80 NOTRE DAME L. REV. 303, 311 (2004) (discussing the increasing turn to recent Latino immigrants in certain occupations and citing sociologist Lisa Cantanzarite’s longitudinal studies showing that “brown collar occupations suffered substantial wage penalties, the penalties were larger for minorities than for whites, and educational levels of the workers in the study did not affect the outcome”); Kraiem, *supra* note 174, at 700 (“Black students are more likely than white students to default on a loan, which possibly reflects a combination of the following factors: higher likelihood of borrowing; higher loan burden due to lower family wealth; increased likelihood of unemployment and lower wages due to discrimination; and discrimination in the housing market.”).

189. Jillian Berman, *All the Ways Student Debt Exacerbates Racial Inequality—‘It’s like Landing in Quick Sand,’* MARKET WATCH (July 27, 2019, 4:36 PM), <https://www.marketwatch.com/story/>

It is worth pausing to note that, although there is significant value to a higher education degree,<sup>190</sup> it is overly simplistic to think that higher education access is going to, by itself, magically solve the racial and ethnic wealth gap.<sup>191</sup> Rather, because higher education has traditionally been a pillar of wealth development and social mobility, access to quality and affordable higher education is one part of the larger picture of racial and ethnic opportunity, income, and wealth disparity.

#### IV. PAVING THE ROAD: TRANSPORTATION LAW AND POLICY

It may seem at first glance that transportation is simply a logistical part of the college experience—that transportation is about subway tokens, bus maps, parking structures, and class schedules. That is, it seems, the way that the Higher Education Act's debt-financed system approaches transportation.<sup>192</sup> But it is also an overly simplistic view of transportation. Rather, transportation is a structural component of both higher education and life that is organized and regulated by law.<sup>193</sup> This Part introduces the reader to three legal lenses applied to transportation law and policy—automobile supremacy, infrastructure and transportation racism, and car buying and lending. It shows how, viewed through each of those paradigms, people of color are disproportionately disadvantaged by current transportation law and policy. This introduction sets the stage for the following Part, which explores how higher education law and policy intersects with these bodies of transportation law.

##### *A. Automobile Supremacy*

The primary method of transport in the United States is the personal vehicle. Between 85% and 95% of households own at least one car.<sup>194</sup> And the public health crisis of the COVID-19 pandemic, with its focus on social distancing, has likely

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all-the-ways-student-debt-is-exacerbating-racial-inequality-its-like-landing-in-quick-sand-one-black-student-says-2019-07-18 [https://perma.cc/R66N-ERUB].

190. See *supra* Section III.A.

191. See DARRICK HAMILTON, WILLIAM DARITY, JR., ANNE E. PRICE, VISHNU SRIDHARAN & REBECCA TIPPETT, UMBRELLAS DON'T MAKE IT RAIN: WHY STUDYING AND WORKING HARD ISN'T ENOUGH FOR BLACK AMERICANS 3 (2015), [http://insightcced.org/wp-content/uploads/2015/08/Umbrellas\\_Dont\\_Make\\_It\\_Rain\\_Final.pdf](http://insightcced.org/wp-content/uploads/2015/08/Umbrellas_Dont_Make_It_Rain_Final.pdf) [https://perma.cc/7V4C-WKUB] (arguing that education alone does not explain economic well-being, especially when viewed across races).

192. See *infra* 267.

193. And, like other legal schemes, the laws affecting transportation cannot be divorced from the nation's racial and ethnic oppression. Cf. RICHARD ROTHSTEIN, THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA (2017) (tracing the *de jure* and *de facto* discrimination inherent in zoning and land use law).

194. Levitin, *supra* note 20, at 1259 (95% of households own at least one car); *Bursting the Auto Loan Bubble*, *supra* note 20, at 2216 (at least 85% of households own at least one car); Nicholas J. Klein & Michael J. Smart, *Car Today, Gone Tomorrow: The Ephemeral Car in Low-Income, Immigrant and Minority Families*, 44 TRANSP. 495, 501 (2017) (finding 13.4% of families were zero-car families in 2011 and recognizing that their finding was larger than the 8.8% of zero-car families reported in the U.S. Census Bureau's American Community Survey, 2005-2009 5-Year Estimates).

reified the preference for individual transportation.<sup>195</sup> Access to a car benefits both the individual and their family—it is correlated with higher employment rates, higher wages, and lower stress.<sup>196</sup> Thus, living without a car is generally not a choice, but rather the effect of financial circumstance—specifically income.<sup>197</sup>

The car-centric nature of America’s economy and society is neither a historical accident nor a natural occurrence. Rather, law and policy developed during the Interstate Era (1956-1991) created infrastructure that prioritized car travel and created mobility barriers for those who did not drive.<sup>198</sup> These priorities and preferences were created and exacerbated by legal scaffolding. Professor Gregory Shill calls this “automobile supremacy,” which is the construction of “diverse bodies of law including traffic regulation, land use law, criminal law, torts, insurance law, environmental law, vehicle safety rules, and even tax law, all of which provide incentives to cooperate with the dominant transport mode and punishment for those who defect.”<sup>199</sup> Shill details the ways that law—across statutes and in unexpected doctrines—subsidizes driving to the detriment of all other forms of transportation and alternate uses of space, and to the detriment of the people who seek to use those alternate forms of transport or space.<sup>200</sup> He cites to everything

195. Pamela Foohey, *Consumers’ Declining Power in the Fintech Auto Loan Market* 15 BROOK. J. CORP. FIN. & COM. L. 5, 40 (2020).

196. Klein & Smart, *supra* note 194, at 497 (first citing Charles Baum, *The Effects of Vehicle Ownership on Employment*, 66 J. URB. ECON. 151 (2009); then citing Evelyn Blumenberg & Michael Manville, *Beyond the Spatial Mismatch: Welfare Recipients and Transportation Policy*, 19 J. PLAN. LITERATURE 182 (2004); then citing Tami Gurley & Donald Bruce, *The Effects of Car Access on Employment Outcomes for Welfare Recipients*, 58 J. URB. ECON. 250 (2005); and then citing Paul M. Ong, *Car Ownership and Welfare-to-Work*, 22 J. POL’Y ANALYSIS & MGMT. 239 (2002)); *Driven to Bankruptcy*, *supra* note 20, at 289–90; David A. King, Michael J. Smart & Michael Manville, *The Poverty of the Carless: Toward Universal Auto Access*, 42 J. PLAN. EDUC. & RSCH. 464 (2022).

197. Foohey, *supra* note 195, at 6; *Driven to Bankruptcy*, *supra* note 20, at 289–90; *see also* Henry Grabar, *Where Rich People Don’t Own Cars*, SLATE (May 17, 2019, 3:01 PM), <https://slate.com/business/2019/05/maps-car-ownership-income-population-density-green-new-deal.html> [<https://perma.cc/D9LS-YWCD>] (noting that income and population density are correlated with car ownership and recognizing that the voluntarily carless both live in population dense cities and are higher income, allowing them to purchase rides as needed).

198. Nancy Jakowitsch & Michelle Ernst, *Just Transportation*, in HIGHWAY ROBBERY: TRANSPORTATION RACISM & NEW ROUTES TO EQUITY 161, 161–62 (Robert D. Bullard, Glenn S. Johnson & Angel O. Torres eds., 2004); *see also* King, Smart & Manville, *supra* note 196, at 466 (“Some of the greatest costs of living without a car, in contrast, arise because in most places most people do have cars, and everyday activities thus assume the presence of a vehicle. Lacking vehicle access inhibits economic participation in ways that lacking plumbing does not.”).

199. Shill, *supra* note 20, at 502.

200. *Id.*; *see also* King, Smart & Manville, *supra* note 196, at 464 (“As society becomes more organized around vehicles, people without vehicles risk being left out of society. This exclusion occurs not just because people with cars can cover more ground more quickly than people without them, but because changes made to accommodate automobiles can affirmatively disadvantage other ways of moving around.”).

from jaywalking laws<sup>201</sup> to zoning laws<sup>202</sup> to traffic laws<sup>203</sup> to environmental laws<sup>204</sup> to argue that the law has created, perpetuated, and preferred cars and drivers above everything else. Through the lens of carlessness and public transportation, this Subsection explores the discriminatory effects of automobile supremacy.

### 1. Carlessness

Low-income communities and communities of color are disproportionately involuntarily carless. Although rates of car ownership in all communities have increased over time, low-income households, Black households, and immigrant households own relatively fewer cars.<sup>205</sup> As society gets increasingly car-centric, zero-car households are falling further behind—they are “poorer in absolute terms today than they were sixty years ago.”<sup>206</sup>

Although carlessness is disproportionately and increasingly correlated with poverty,<sup>207</sup> studies have also correlated carlessness with race, even when controlling for poverty.<sup>208</sup> Looking at car-free households *not* living in poverty, researchers found that Black and Latino families experienced periods of carlessness more frequently than their White peers.<sup>209</sup> Black families were twice as likely to experience carlessness.<sup>210</sup> And even when a household had a car, these populations were more likely to have fewer than one car per adult in the household.<sup>211</sup> This connection between carlessness, poverty, and race is evident in the structure of the college Jenga® tower and the ways transportation barriers affect the tower’s very foundation.

Further, there is a connection between access to traditional banking products, carlessness, and race. In one study, researchers found that more than 40% of unbanked households (households without a checking account) did not have a car,

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201. Shill, *supra* note 20, at 529.

202. *Id.* at 539.

203. *Id.* at 500–01.

204. *Id.*

205. Klein & Smart, *supra* note 194, at 497–99.

206. King, Smart & Manville, *supra* note 196, at 465 (“Between 1960 and 2014, the U.S. poverty rate fell from twenty-four percent to fourteen percent. For households without vehicles, however, the poverty rate slightly *rose*, from forty-two percent to forty-four percent. And within the population in poverty, vehicle access increased sharply, from almost sixty percent to just above eighty percent.”).

207. *See infra* notes 227–228. The Department of Labor reported that an average vehicle costs nearly \$10,000 annually to own and operate. BUREAU OF LAB. STATS., USDL-21-1804, CONSUMER EXPENDITURES—2021 (2022), <https://www.bls.gov/news.release/pdf/cesan.pdf> [<https://perma.cc/98C8-D5RP>].

208. Klein & Smart, *supra* note 194.

209. *Id.* at 504–05 (the data also showed, however, that Hispanic families’ carlessness dropped disproportionately over time).

210. *Id.* at 502–05.

211. *Id.* at 501–02 (thirty percent of Hispanics reported less than one car per adult in the household, compared to twelve percent of non-Hispanic whites, eighteen percent of non-Hispanic Blacks, and twenty-six percent of non-Hispanic Asians).

compared to 10% of households with bank accounts.<sup>212</sup> Even when controlling for income, a study found that 59% of unbanked households in the bottom income decile did not have a car, compared with 39% of banked households in the same income bracket.<sup>213</sup> These ostensibly race neutral statistics are anything but neutral. Racial and ethnic minorities in the United States are disproportionately unbanked. As of 2019, almost 14% of Black households and more than 12% of Hispanic households were unbanked, as compared to 2.5% of White households.<sup>214</sup>

Carlessness exacerbates existing discrepancies in transportation access. And though families move into and out of carlessness over time,<sup>215</sup> even intermittent periods without access to a car have significant and detrimental effects. The uncertainty associated with churning in and out of car access makes it difficult to develop and execute a plan, where transportation costs, access, and subsidies may fluctuate.<sup>216</sup> It is no surprise, then, that when students like Michelle or Doris had only intermittent access to a car,<sup>217</sup> it was nearly impossible to maintain the delicate balance between competing responsibilities, including schooling.

## 2. Public Transit

Because the paradigm of automobile supremacy prefers car transport, it actively depresses access to other forms of transportation. By prioritizing automobile travel, policy and resources are shifted from public transit to car transport.<sup>218</sup> Between the creation of the Urban Mass Transit Administration in 1964<sup>219</sup> and 2004, Congress allocated approximately \$50 billion to public transit.<sup>220</sup>

212. King, Smart & Manville, *supra* note 196, at 470.

213. Klein & Smart, *supra* note 194, at 496.

214. FED. DEPOSIT INS. CORP., HOW AMERICA BANKS: HOUSEHOLD USE OF BANKING AND FINANCIAL SERVICES 2 (2019).

215. Klein & Smart, *supra* note 194, at 496.

216. “[T]he transportation resources and travel patterns of low-income households can be unreliable. For example, low-income households are often dependent on older cars that have frequent mechanical difficulties. Many low-income individuals rely on family and friends to provide rides or money, yet the generosity of family and friends can vary over time. Finally, many low-income transit riders routinely depend on the receipt of transit subsidies from agencies and organizations that may or may not regularly provide them. Some of the subsidy programs require recipients to meet specific requirements to be eligible for services. Budgeting in the face of these volatile conditions can be like shooting at a moving target.” ASHA WEINSTEIN AGRAWAL, EVELYN A. BLUMENBERG, SARAH ABEL, GREGORY PIERCE & CHARLES N. DARRAH, GETTING AROUND WHEN YOU’RE JUST GETTING BY: THE TRAVEL BEHAVIOR AND TRANSPORTATION EXPENDITURES OF LOW-INCOME ADULTS 50 (2011).

217. See *supra* notes 54, 109–113.

218. Foohey, *supra* note 195, at 5 (noting that, by preferencing car travel in most of the country, “infrastructure prevents even moderately efficient travel without a car”).

219. President Lyndon B. Johnson signed the Urban Mass Transportation Act, creating the Administration, in 1964. *A Brief History of Mass Transit*, FED. TRANSIT ADMIN. (Mar. 27, 2020), <https://www.transit.dot.gov/about/brief-history-mass-transit> [https://perma.cc/5RKP-BFU2]. Today, the agency is called the Federal Transit Administration. *Id.*

220. Robert D. Bullard, *Introduction*, in HIGHWAY ROBBERY, *supra* note 198, at 1, 5.



In nearly the same time frame (from 1956 to 2004), Congress allocated more than \$205 billion to roadway projects.<sup>221</sup> Roadway spending accounts for approximately 80% of federal spending on surface transportation, leaving only 20% for public transportation.<sup>222</sup> By preferencing car travel, costs are shifted from drivers to nondrivers and to society at large.<sup>223</sup> In that way, carless people—disproportionately people of color—are negatively affected on both ends of the commute.

More than 40% of people in the United States have no access to affordable public transit.<sup>224</sup> And as spending on road infrastructure has far outpaced spending on mass transit, the poor and communities of color have been literally and figuratively left behind. That is because these households disproportionately rely on public transit. As of 2004, Black and Latino people made up 54% of overall public transit users and 62% of bus riders nationally.<sup>225</sup> In Los Angeles, for example, “the bus system was understood to be the avenue of last resort for the urban poor, the elderly, the disabled, and students, and as LA’s urban poor became increasingly Latino, black, Asian, and Pacific Islander, so did most of the bus riders.”<sup>226</sup> Even in New York City, where more of the population relies on public transportation, the income gap between those who own cars and those who rely on public transportation is significant.<sup>227</sup>

But automobile supremacy’s paradigm leads to more than just shifting costs. The legal subsidies provided for car travel “legitimate a state of choice deprivation and inequity, serving as an excuse for the status quo’s many curable flaws and injustices.”<sup>228</sup> This is the intersection of racial and ethnic inequity and transportation law, what some

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221. *Id.* at 4.

222. *Transportation Policy*, *supra* note 20, at 2142.

223. Shill, *supra* note 20, at 502. Car travel is not the only place where policy prefers one kind of transportation over another. In Los Angeles, the rail system has been prioritized to the detriment of the bus system. Eric Mann, *Los Angeles Bus Riders Detail the MTA*, in *HIGHWAY ROBBERY*, *supra* note 198, at 33, 35–36 (arguing that the “rail versus bus” debate was a racial debate).

224. CRESPI, BRUECKER & SELDIN, *supra* note 144, at 2.

225. *Transportation Policy*, *supra* note 20, at 2143.

226. Mann, *supra* note 223, at 34.

227. King, Smart & Manville, *supra* note 196, at 473 (explaining that, in New York, the discrepancy has “a different source: it arises because people with cars are more likely to be rich, not because people without cars are more likely to be poor”).

228. Shill, *supra* note 20, at 502. Shill explains further, “[i]n the United States, motor vehicles create more greenhouse gas emissions and kill more children than any other cause. They rack up trillions of dollars in direct and indirect costs annually, ranging from time lost in traffic to decreased brain function in urban children to cancers and other debilitating conditions caused by exhaust emissions, tire and brake pad wear, and road construction. Singled out are vulnerable people—including children, seniors, the poor, people of color, and people with disabilities—whom our car-first transport regime immiserates, impoverishes, and kills with uncommon frequency and precision.” *Id.* at 500–01.

call “transportation racism.”<sup>229</sup> Transportation racism affects both the siting of transportation infrastructure and the related decisions around public transit.<sup>230</sup>

### *B. Infrastructure and Transportation Racism*

Decisions about when and where to build transportation infrastructure—both infrastructure to support car travel and infrastructure to support public transit—evidence racial bias and discrimination. The infrastructure of transportation originated through and was created by law and policy. Federal statutes such as the Federal-Aid Highway Act of 1956 (also known as the Defense Highways Act or the Interstate Highway Act) and the 1949 Housing Act directed funds for highway creation that resulted in splintered and segregated communities of color.<sup>231</sup> This Article joins a burgeoning group of legal scholars focusing on the racially exclusionary effects of the built environment, including transportation infrastructure.<sup>232</sup>

Decisions about public transportation infrastructure evidence structural racism. In Atlanta, for example, the public transit system is a physical symbol of race-based economic and geographic divisions.<sup>233</sup> Not only has the Metropolitan Atlanta Rapid Transit Authority (MARTA) flippantly been known as “Moving Africans Rapidly Through Atlanta,”<sup>234</sup> MARTA has de-prioritized routes and shelters that serve primarily minority populations.<sup>235</sup> Analysis of the length of routes, average shelter per route, and average shelter per mile shows that, along every axis, non-minority routes are shorter, have more shelters, and have shelters closer together.<sup>236</sup>

Decisions about when and where to build infrastructure to support automobile travel also show signs of racial bias and discrimination. Such choices have disproportionately burdened communities of color. Scholars have traced this occurrence in the siting of expressways and highways, which have historically cut through Black and Brown communities, devastating businesses and communities. Professor Deborah Archer explains:

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229. Bullard, *supra* note 220, at 1–2; *see also White Men’s Roads*, *supra* note 20, at 1302 n.265 (defining “transportation racism” to “refer[] to racist policies and practices that negatively affect the ability of communities of color to interact, move, maintain, and sustain themselves”).

230. It also arises in the built environment. *See infra* Section V.B.

231. *White Men’s Roads*, *supra* note 20, at 1264–65; *see also* Scott Beyer, *How the U.S. Government Destroyed Black Neighborhoods*, CATALYST (April 2, 2020), <https://catalyst.independent.org/2020/04/02/how-the-u-s-government-destroyed-black-neighborhoods/> [<https://perma.cc/WW7B-W5UD>].

232. *See* Shill, *supra* note 20; *Transportation Policy*, *supra* note 20; Schindler, *supra* note 20.

233. Robert D. Bullard, Glenn S. Johnson & Angel O. Torres, *Dismantling Transit Racism in Metro Atlanta*, in *HIGHWAY ROBBERY*, *supra* note 198, at 49, 52.

234. *Id.* at 53.

235. *Id.*

236. *Id.* at 53, 64 (detailing evidence that routes serving primarily populations of color averaged 8.45 miles in length with an average of 3.68 shelters per route and a ratio of 0.46 shelters per mile compared to nonminority routes, which averaged 3.998 miles with an average of 6.14 shelters per route and a ratio of 0.70 shelters per mile).

Ultimately, the nation's highway system contributed to today's intense racial segregation and concentrated racialized poverty, and created physical, psychological, and economic barriers that persist to this day. Class and racial inequality, economic deprivation and depression, residential isolation and segregation, are all a part of the legacy of highway politics that focus on growth and expansion at the expense of Black communities, building roads to whites-only suburbs through the heart of Black neighborhoods.<sup>237</sup>

In 2018, former U.S. Department of Transportation Secretary Anthony Foxx reflected:

The interstate highway system is at once a marvel of ingenuity and efficiency . . . and an example of how physical barriers can create and exacerbate social ones. No city was spared the system's effects, largely affecting minority and low-income areas in Detroit, New Orleans, Los Angeles, Chicago, New York City, and my hometown, Charlotte . . . . Many routes cut through the hearts of low-income and minority communities, often in conjunction with urban renewal programs that purported to remove urban blight.<sup>238</sup>

Expanding beyond roads and interstates, Professor Sarah Schindler describes how the overall built environment has become a mechanism for exclusion, a process she calls "architectural exclusion."<sup>239</sup> She looks at the ways that barriers—in the form of highways, bridges, and one-way streets—act as informal regulation of mobility.<sup>240</sup> Schindler points to a known example of Robert Moses's reshaping of New York's infrastructure, including his choice to build overpasses leading to a beloved public park so low that buses could not access the park.<sup>241</sup> Because so much

237. *Transportation Policy*, *supra* note 20, at 2136.

238. Anthony Foxx, *More Than Engineering: Infra-structure Shapes Places*, URB. INST.: USING DOLLARS WITH SENSE (Jan. 16, 2018), <https://www.urban.org/infrastructure/more-engineering-infrastructure-shapes-places> [<https://perma.cc/FJ23-77HL>].

239. Schindler, *supra* note 20; *see also* Elise C. Boddie, *Racial Territoriality*, 58 UCLA L. REV. 401, 405–06 (2010) (arguing that antidiscrimination law should account for the "whiteness" of a space and that "[r]acial territoriality occurs when the state excludes people of color from—or marginalizes them within—racialized white spaces that have a racially exclusive history, practice, and/or reputation"); Aaron Golub, Richard A. Marcantonio & Thomas W. Sanchez, *Race, Space, and Struggles for Mobility: Transportation Impacts on African Americans in Oakland and the East Bay*, 34 URB. GEOGRAPHY 699, 700 (2013) (noting how the historical record from 1970 through the 2000s in the East Bay, California, "shows the deep imprint that overt racism has left on the built environment, and allows us to appreciate how racially neutral decision-making of the period since the civil rights movement, by layering onto a segregated metropolitan geography, acts to reproduce, and reinforce racial barriers to opportunity").

240. Schindler, *supra* note 20.

241. *Id.* at 1937.

of transportation law and policy is connected to the built environment, it is particularly hard to unwind racially discriminatory law and policy.<sup>242</sup>

But transportation policy is not simply a relic of the past.<sup>243</sup> Prior decisions about the built environment have both short-term and long-term effects.<sup>244</sup> In 2020, social scientists reported that low-income communities of color “that disproportionately faced lack of access to reliable transportation and the pollution of roads and highways running through their communities, were at increased risk of contracting COVID-19.”<sup>245</sup>

### C. Car Buying and Lending

Built infrastructure is not the only structural legacy of race and racism. Financial infrastructure similarly disadvantages certain populations. Car lending and buying is where physical and financial infrastructure meet, exacerbating disparities.

As is clear from the legal and policy literature on transportation, it is very difficult to be and remain carless.<sup>246</sup> Therefore, it is unsurprising that individuals and families do whatever they must to gain access to a car. That often means turning to auto loans.<sup>247</sup> More than two in every three Americans must take a loan to afford a car.<sup>248</sup> In the last ten years, Americans’ auto loan debt has increased dramatically by almost forty percent.<sup>249</sup> At last count, Americans owed an aggregate of \$1.33 trillion in auto loan debt.<sup>250</sup> Approximately one in every four of those loans are subprime.<sup>251</sup> Auto debt now accounts for a significant portion of household balance sheets; auto debt makes up the largest number of debt accounts after credit card debt in America.<sup>252</sup>

242. *Id.*

243. See Caitlin Johnston, *Here’s How Tampa Bay’s \$6B Highway Expansion Will Burden Minorities*, TAMPA BAY TIMES (June 12, 2016), <https://www.tampabay.com/news/transportation/roads/heres-how-tampa-bays-6b-highway-expansion-will-burden-minorities/2281102/> [https://perma.cc/BR4B-UWEQ] (explaining how a proposed \$6 billion project to widen Tampa’s highways to create toll lanes “puts a disproportionate burden on minority and low-income residents whose homes are in its path”).

244. See Golub, Marcantonio & Sanchez, *supra* note 239.

245. *Transportation Policy*, *supra* note 20, at 2128.

246. King, Smart & Manville, *supra* note 196, at 464; see also Nicole K. McConlogue, *The Road to Autonomy*, OKLA. L. REV. (forthcoming) (arguing that “transportation justice proposals simply cannot ignore cars”).

247. See Zoom Audio Interview with Patricia (Dec. 21, 2020) (transcript on file with author) (recalling that “she ‘had to balance’ her ‘car note and [] cell phone and stuff that [she] need[ed] for [her]self”).

248. Foohey, *supra* note 195, at 7 n.12.

249. *Id.* at 7.

250. *Id.* at 12.

251. *Id.*

252. RSCH. & STATS. GRP., FED. RSRV. BANK OF N.Y., QUARTERLY REPORT ON HOUSEHOLD DEBT AND CREDIT (2021), [https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc\\_2021q1.pdf](https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2021q1.pdf) [https://perma.cc/7M82-QL7T].

Although Americans are deeply in auto debt, researchers have found that low-income households prioritize their transportation costs and “strategically manage their limited household resources in order to survive and respond to changes in income or transportation costs.”<sup>253</sup> Because they prioritize transportation to survive,<sup>254</sup> some families have no choice but to employ strategies that have negative effects, including increased stress and anxiety, reduced spending on other necessities, reduced participation in other activities, and increased geographical isolation.<sup>255</sup> Even those strategies are not failsafe, as both income and expenses of poor households are often unstable.<sup>256</sup>

Not only is the car note another debt to balance with education debt and other costs of living,<sup>257</sup> but auto purchase and lending is yet another market where low-income people and people of color, particularly Black and Latino car buyers, have generally faced exploitation and discrimination.<sup>258</sup> Studies have found discrimination in the auto sales and lending market based on gender, race, and ZIP codes.<sup>259</sup> And current regulation and consumer protections insufficiently address the range of abuses.<sup>260</sup>

Professor Adam Levitin explores the uniquely problematic market of auto lending, pointing to significant room for discrimination and inequities due to both the “structure of the loan transaction and the institutional structure of the market.”<sup>261</sup> Levitin explains how the structure of the auto lending market, where the lender’s customer is the dealer rather than the car buyer, creates incentives that harm the consumer.<sup>262</sup> It is unsurprising, therefore, that Levitin finds “substantial evidence” that certain parts of the transaction can be discriminatory.<sup>263</sup> For example, “a 2019 study found that not only are black and Hispanic loan applicants 1.5% less likely to have their loans approved than white applicants, controlling for

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253. ARAWAL ET AL., *supra* note 216.

254. *Driven to Bankruptcy*, *supra* note 20, at 315.

255. ARAWAL ET AL., *supra* note 216, at 4.

256. *Id.* at 50 (“Budgeting in the face of these volatile conditions can be like shooting at a moving target.”).

257. *See id.*

258. Foohey, *supra* note 195, at 10 (“The disadvantageous market structure also means that auto sales and lending is ready-made for discriminatory behavior.”).

259. *Id.* at 10–11 (citing studies); Ian Ayers, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 841 (1991) (detailing race and gender discrimination in the auto sale market).

260. *See* Steven W. Bender, *Consumer Protection for Latinos: Overcoming Language Fraud and English-Only in the Marketplace*, 45 AM. U. L. REV. 1027, 1029–30 (1996) (“Existing consumer protection regulation too often assumes that consumers are proficient in English or, if not, are accompanied in their transactions by an interpreter. Sadly, this gap in protection has made some Latinos/as and other language minorities the victims of choice for unscrupulous merchants who prey on their inability to understand the terms of the bargain.”).

261. Levitin, *supra* note 20, at 1261.

262. *Id.* at 1264.

263. *Id.* at 1297 (citing studies).

creditworthiness, but that the interest rates on loans approved for minority borrowers are seventy basis points higher than those for comparable white borrowers.”<sup>264</sup> Levitin also found that buyers of color are more likely to be targeted for add-ons and that the average mark-ups were higher for Hispanic and Black borrowers.<sup>265</sup> And subprime auto lending is particularly dangerous and leads many to delinquency and default.<sup>266</sup> Upon default, the owner’s car may be repossessed, leading to a bout of carelessness and the negative outcomes associated with lack of a car.<sup>267</sup>

#### V. INTERSECTING STRUCTURES: TRANSPORTATION AND HIGHER EDUCATION

This Section layers laws governing and affecting higher education on top of the transportation law and policy introduced above. It offers evidence and examples of how higher education law and policy exacerbate systemic transportation barriers, thus reinforcing the disproportionately negative effects on students of color. By looking at the combination and implementation of these varied laws, this Section argues that the intersections of two structural systems—transportation and higher education—reinforce racial inequalities.

Yet, there is hope. Following each explanation of the overlap of higher education law on three areas of study—automobile supremacy, transportation racism and built environments, and car lending and buying—this Section offers ideas and examples of how higher education law and law adjacent to higher education can combat inequities. As the transportation laws and policies are intertwined—one cannot separate automobile supremacy from transportation racism, for example—the suggestions should be viewed as cumulative.

##### *A. Making the Connection: Higher Education and Automobile Supremacy*

The paradigm of automobile supremacy is baked into college campuses and college experiences. This is clear from the study underlying this Article, where lack of access to a reliable and affordable car caused problems related to cost, time, schedule, and stress.<sup>268</sup> It is also clear from the larger literature, where a common sentiment is that students are “one flat tire from dropping out.”<sup>269</sup> Yet, even as transportation infrastructure and costs affect equal access to college success, the

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264. *Id.*

265. *Id.* at 1304.

266. *Bursting the Auto Loan Bubble*, *supra* note 20, at 2217 (“Auto loan deficiencies hit all-time high after all-time high through the end of 2019, with seven million Americans ninety or more days behind on their auto loan payments. Before the COVID-19 pandemic, people with subprime auto loans were defaulting within the first few months of borrowing at rates rivaling those during the 2008 financial crisis.”).

267. *See supra* Section V.A.1.; *see also Driven to Bankruptcy*, *supra* note 20, at 311 (even in bankruptcy, car owners have better outcomes than the bankruptcy filers who do not own a car).

268. *See supra* Section II.B.

269. CRESPI, BRUECKER & SELDIN, *supra* note 144, at 1, 2.

Higher Education Act exacerbates, rather than mitigates, the effects of automobile supremacy theory.

### 1. Higher Education's Transportation Infrastructure

Transportation is an expensive part of higher education for everyone. CollegeBoard estimates that full-time undergraduate transportation budgets range from \$1,060 annually for a private nonprofit four-year on-campus student to \$1,230 annually for a public four-year on-campus student.<sup>270</sup> Another data source, the Student Expenses and Resources Survey (“SEARS”), surveyed more than 15,400 college students in California about their mode of commuting to campus, cost of commuting to campus, cost of commuting to employment, and whether they have enough resources to cover specific expenses, including transportation.<sup>271</sup> While just over 15% reported that they paid nothing to commute between home and campus, 44% spent less than \$100 per month, 28% spent between \$100–199 per month, and more than 12% spent in excess of \$200 monthly in commuting costs between home and school. For those who also worked at least one job, 33% spent an additional \$1–99 per month commuting; 15% spent an additional \$100–199 commuting; and 5% spent more than \$200 commuting.<sup>272</sup> More than 17% of those surveyed reported that they did not have enough resources to cover transportation costs.<sup>273</sup>

Although the above statistics make it clear that transportation may be a burden for many students, it is particularly expensive for commuter students, especially those that commute between home, school, and work.<sup>274</sup> And it's worth noting that, in contravention of the typical vision of a college student, approximately 85% of college students are commuters.<sup>275</sup> Transportation costs run \$1,840 annually for a public two-year in-district commuter,<sup>276</sup> and 99% of community college students are commuters.<sup>277</sup> Because people of color are more likely to be commuter

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270. JENNIFER MA & MATEA PENDER, COLL. BD., TRENDS IN COLLEGE PRICING AND STUDENT AID 2021, at 11 fig.cp-1 (2021), <https://research.collegeboard.org/media/pdf/trends-college-pricing-student-aid-2021.pdf> [<https://perma.cc/9AAL-34JP>].

271. CAL. STUDENT AID COMM'N, STUDENT EXPENSES AND RESOURCES SURVEY (SEARS) DATA CODEBOOK 2018-19, at 1 (2019), [https://www.csac.ca.gov/sites/main/files/file-attachments/sears\\_ruf\\_codebookpublic.pdf?1575327353](https://www.csac.ca.gov/sites/main/files/file-attachments/sears_ruf_codebookpublic.pdf?1575327353) [<https://perma.cc/R6A9-XQC8>].

272. *Id.* at 5, 13, 14 (63.37% of the 15,419 students surveyed were employed for pay).

273. *Id.* at 23.

274. *See id.*

275. Barbara Jacoby, Opinion, *What About the Other 85 Percent?*, INSIDE HIGHER ED (July 23, 2020), <https://www.insidehighered.com/views/2020/07/23/colleges-should-be-planning-more-intentionally-students-who-commute-campuses-fall> [<https://perma.cc/G5P9-T89W>].

276. *See* MA & PENDER, *supra* note 270.

277. Marva Craig, Opinion, *Transportation Costs Can Block Student Success at Community College*, HECHINGER REP. (Feb. 12, 2019), <https://hechingerreport.org/opinion-transportation-costs-can-block-student-success-at-community-college/> [<https://perma.cc/HTQ8-FUKD>] (finding that the average full-time community college student spends just over \$1,700 each year on transportation costs, including gas, car payments and insurance).

students<sup>278</sup> and people of color are more likely to attend community and technical colleges,<sup>279</sup> commuting costs fall disproportionately on students of color.

The majority of students rely on cars to get to and from college. In the SEARS study, more than 60% of respondents reported that they drove a car or truck to college, 13% relied on carpools, 15% used the bus, and 12% walked.<sup>280</sup> Those with cars paid more than \$9,000 annually to own and maintain a vehicle.<sup>281</sup> And transportation costs are regressive. Reports show that low-income, people of color households often spend nearly one-third of their income on transportation costs.<sup>282</sup> That is because “[d]riving has high fixed costs and volatile operating costs.”<sup>283</sup> Although fuel only accounts for an average of 18% of transportation costs, it is an unavoidable uniform cost.<sup>284</sup> Further, reports show that low-income individuals and people of color are subject to worse pricing, less advantageous financing options, and discrimination in car buying and financing.<sup>285</sup>

As is clear from the data and literature discussed in this Article,<sup>286</sup> not all students have access to a reliable and affordable car. Students of color are less likely to have access to reliable cars.<sup>287</sup> Further, national statistics show that people of color are more reliant on public transit.<sup>288</sup> But public transit is not always available, particularly for commuter students at community colleges. The Seldin/Haring-Smith Foundation (SHSF) Public Transit Map drew on publicly available data to map transportation accessibility at colleges and universities across the United States.<sup>289</sup> SHSF found that community and technical colleges were the least adequately connected to public transit, as compared to public colleges and

278. Corinne Maekawa Kodama, *Supporting Commuter Students of Color*, in UNDERSTANDING AND ADDRESSING COMMUTER STUDENT NEEDS 45, 45 (J. Patrick Biddix ed., 2015) (recognizing that many commuter students are students of color).

279. Moran, *supra* note 34, at 94–95 (noting that community colleges “disproportionately serve students of color and low-income students”).

280. CAL. STUDENT AID COMM’N, *supra* note 271, at 3–4.

281. PRICE & CURTIS, *supra* note 142.

282. BULLARD, *Introduction*, *supra* note 220, at 2; *see also* King, Smart & Manville, *supra* note 196, at 471 (data that “low-income households with vehicles constantly struggle to manage the costs of their cars” is consistent with prior research (first citing Evelyn Blumenberg & Asha W. Agrawal, *Getting Around When You’re Just Getting By: Transportation Survival Strategies of the Poor*, 18 J. POVERTY 355 (2014); and then citing Klein & Smart, *supra* note 194)).

283. King, Smart & Manville, *supra* note 196, at 469.

284. *Id.* at 470.

285. *See infra* Section V.C.

286. *See supra* Section V.A.1.; *supra* notes 102–106 (recognizing the small number of participants with reliable cars in the Latino college completion study).

287. *See supra* notes 102–106.

288. *See, e.g.*, Nicole Stelle Garnett, *The Road from Welfare to Work: Informal Transportation and the Urban Poor*, 38 HARV. J. ON LEGIS. 173, 182 (2001) (“African American workers are more than three times as likely to use public transit than white workers.”).

289. The SHSF Public Transit Map is a first look at American college students’ access to public transportation. CRESPI, BRUECKER & SELDIN, *supra* note 144, at 5.



universities and private non-profit colleges and universities.<sup>290</sup> Of the nearly 1,400 community and technical colleges surveyed, SHSF found that nearly 57% had a transit stop within a half mile of campus, but more than 18% had no transit stop within 4.5 miles of campus.<sup>291</sup>

Public transportation infrastructure near colleges and universities is only one side of the coin. If students do not have access to public transit near their homes and near their jobs, they still cannot access a college education.<sup>292</sup> Rural students, for example, have almost no access to public transit and travel approximately fifty-three miles round-trip to and from campus.<sup>293</sup> Even so, access to public transportation does not necessarily solve the higher education transportation problem. Transportation must be efficient, affordable, reliable, and coordinated to students' carefully crafted schedules.<sup>294</sup>

## 2. Higher Education and Automobile Supremacy

While the notion of automobile supremacy has been adopted and integrated into college campuses, higher education law and policy does little to dull the negative effects, especially for students of color. In fact, the Higher Education Act—higher education's primary legal scheme—exacerbates the effects of automobile supremacy's paradigm on college campuses. Specifically, Title IV of the Higher Education Act, which governs higher education financing, including the federal student loan system, exacerbates the plight of the carless student.<sup>295</sup>

290. *Id.* at 12. Further, a survey undertaken by the Transportation Research Board of the National Academy of Sciences found that, where there was public transit to campuses, 90% were accessible by fixed bus routes, and only 9% by urban or light rail systems. PRICE & CURTIS, *supra* note 142 (citing TARA KRUEGER & GAIL MURRAY, TRANSIT SYSTEMS IN COLLEGE AND UNIVERSITY COMMUNITIES: A SYNTHESIS OF TRANSIT PRACTICE 7 (2008)).

291. CRESPI, BRUECKER & SELDIN, *supra* note 144, at 9 (remainder had transit stops within 0.5 and 4.5 miles from campus). More than thirty-five percent of college students attend a community college and ninety-nine percent of community college students are commuters. *Id.* at 2. Minority-serving institutions, when broken out, fared better; of the nearly 800 surveyed, nearly seventy-four percent are located within half of a mile of the nearest transit stop, while nearly eleven percent have no transit stop within 4.5 miles of campus. *Id.* at 19. Of the nearly 2,000 public colleges and universities surveyed, just over sixty-two had a transit stop within a half mile of campus, but just over fifteen percent had no transit stop within 4.5 miles of campus. *Id.* at 17. In surveying all public and private non-profit colleges together, numbering nearly 3,500, SHSF found that sixty-six percent had a transit stop within a half a mile and just over thirteen percent had no transit stop within 4.5 miles of campus. *Id.* at 21.

292. See, e.g., PRICE & CURTIS, *supra* note 142.

293. Smith, *supra* note 145.

294. Scholars often refer to this construct as "time poverty," generally traced to Clair Vickery. See Clair Vickery, *The Time-Poor: A New Look at Poverty*, 12 J. HUM. RSCS. 1, 27–48 (1977); see also CRESPI, BRUECKER & SELDIN, *supra* note 144, at 13 ("[S]tudents cannot benefit from public transit unless the routes and schedules match their realities.").

295. 20 U.S.C. §§ 1070–1099d.

The majority of college students finance their higher education with loans;<sup>296</sup> students of color disproportionately finance their higher education with loans.<sup>297</sup> Student loans are designed to allow those who could otherwise not afford higher education a path to a degree.<sup>298</sup> But when life costs, including transportation costs, are not adequately covered by financial aid, those costs can be the death knell for a student's college career.<sup>299</sup>

Colleges can and do account for transportation costs in determining cost of attendance ("COA"),<sup>300</sup> but these costs are likely undercounted. Each individual institution is responsible for determining the COA at its institution/campus.<sup>301</sup> The COA is then used to determine the maximum amount of a student's federal financial aid package.<sup>302</sup> Institutions are permitted to include transportation costs in COA, but the accounting lacks transparency. That is because: (1) institutions account for transportation costs as part of an umbrella "other expenses," making it difficult to determine whether they are underestimating or overestimating the costs;<sup>303</sup> (2) everything is estimated on an averaged basis, which necessarily means that approximately half of the students pay more for transportation;<sup>304</sup> and (3) colleges and universities have an incentive to underestimate their costs to attract students.<sup>305</sup> To make matters worse, Section IV of the Higher Education Act

296. *Borrowing*, URB. INST.: UNDERSTANDING COLL. AFFORDABILITY, <http://colleageaffordability.urban.org/covering-expenses/borrowing/#/> [<https://perma.cc/6B9T-NT34>] (last visited Jan. 28, 2023) (noting that, each year thirty to forty percent of undergraduates finance their education through debt; over time, seventy percent of bachelor degree holders have debt by the time they graduate).

297. See STUDENT BORROWER PROT. CTR., *supra* note 175; CTR. FOR RESPONSIBLE LENDING, *supra* note 177.

298. Elengold, *supra* note 3, at 16 (noting that Congress has pushed increased college access by turning to increased loan access).

299. See *supra* Section IV.B.

300. Costs of attendance are then used to determine access to financial aid, including federal loans. For further discussion, see Kelchen, *supra* note 151.

301. See 20 U.S.C. § 1015a(a)(2) (defining "cost of attendance" in the Higher Education Act).

302. See 20 U.S.C. § 1015a(a)(3) (defining "net price" as the price actually charged minus aid); U.S. DEP'T. OF EDUC., FED. STUDENT AID HANDBOOK 2019-20, at 3-33, 3-41, (2019), <https://fsapartners.ed.gov/sites/default/files/attachments/2019-10/1920FSAHbkVol3Ch2.pdf> [<https://perma.cc/CQ8E-ALZS>] ("The cost of attendance (COA) is the cornerstone of establishing a student's financial need, as it sets a limit on the total aid that a student may receive for purposes of the TEACH Grant, Campus-Based Programs, and Direct/Direct PLUS loans, and is one of the basic components of the Pell Grant calculation.").

303. *Id.* at 3-43.

304. Data for books and supplies, transportation, and other expenses are for 2019–20 and reflect the average amounts allotted in determining the total cost of attendance and do not necessarily reflect actual student expenditures. See MA & PENDER, *supra* note 270; U.S. DEP'T EDUC., *supra* note 302; CRESPI, BRUECKER & SELDIN, *supra* note 144, at 13 (transportation expenses are not always fully accounted for in financial aid packages).

305. See, e.g., Tomiko Brown-Nagin, *Rethinking Proxies for Disadvantage in Higher Education: A First Generation Students' Project*, 2014 U. CHI. LEGAL F. 433, 435 (2014) ("Costs are high and admission is ultra-competitive; officials practice strategic enrollment management in which the fiscal implications of admissions and financial aid decisions affect access. In this environment, talented but

permits schools to include commuting costs for vehicle operation and maintenance, but not for vehicle purchase.<sup>306</sup> So, when Michelle's car broke down<sup>307</sup> or Jessica found public transit impossible to manage,<sup>308</sup> costs of buying a vehicle would have exceeded their financial aid awards. In financing college, especially for those whose families cannot foot the bill, transportation costs are generally hidden, hazy, and unaccounted for. The primary higher education policy—the Higher Education Act—thus fails to understand or adequately deal with the extent of transportation's role in college success and completion.

When a student has a transportation-related financial crisis, they must find a way to fix the problem. This usually means working more hours, spending less somewhere else, or cutting out a transportation destination like school.<sup>309</sup> Regardless of the student's coping method, the transportation barriers lead to additional barriers, operating much like removing multiple support blocks from the student's college Jenga® towers, making it that much more difficult to complete college.<sup>310</sup>

*a. Possibilities for Change – Automobile Supremacy*

Federal, state, municipal, and institutional higher education policy and programming—alone or in combination—can limit transportation barriers, making higher education more accessible and more equitable. Across a spectrum of change, from incremental to sweeping, by changing higher education's approach to transportation, the above players can reduce the negative effects of the transportation law and policy.

Federal law can affect the role of transportation in either helping students complete higher education degrees or further stymieing their college dreams. The most obvious change is to retool how federal student aid is formulated and awarded. Right now, based on information provided in a student's Federal Application for

impoverished students can fall through the cracks if universities do not make a conscious effort to reach them.”).

306. See U.S. DEP'T EDUC., *supra* note 302, at 3-43; CRESPI, BRUECKER & SELDIN, *supra* note 144, at 4.

307. See Interview with Michelle, *supra* note 41.

308. See Interview with Jessica, *supra* note 123.

309. Zoom Audio Interview with Marisol (Dec. 30, 2020) (transcript on file with author) (regarding transportation as the connective thread: “Well, it was definitely connected because of money. So it's either if I would have had the money or if I would have had . . . I don't know. I would rather say that it's connected to the opportunities. I didn't have the opportunities to get financial aid, or get a scholarship, or get any type of help to pay for college. Which made me restless about the transportation. Which made me think, ‘Oh, now I have to work.’ Which led to a lot of things.”).

310. DREAMS INTERRUPTED, *supra* note 19, at 20–21 (“[The participants’] many other competing responsibilities required that their lives—and the way they got around to the various parts of their lives—required a carefully fashioned and organized plan. When that plan was disturbed, it often became impossible to continue on the carefully conceived path.”).

Financial Student Aid (“FAFSA”),<sup>311</sup> the Department of Education, through the student’s college, offers the student grants and loans up to the cost of attendance.<sup>312</sup>

Two significant changes to the current protocol would positively affect students facing transportation barriers. First, federal policy could make uniform the formula by which schools determine their cost of attendance. As part of such a process, understanding the role of cars in our current transportation infrastructure, federal policy should allow for the cost of a new or replacement vehicle in the cost of attendance. In fact, any cost of attendance analysis should realize the full reality of students’ transportation needs, including “trip chaining,” which is linking short stops in the trip from home to school or work, an issue that disproportionately affects women,<sup>313</sup> and the critical relationship between housing and transportation.<sup>314</sup> By making COA more uniform and transparent, these changes would more accurately reflect the actual cost of college, including transportation costs.<sup>315</sup> Even if that level of standardization is not realistic, through statutory and regulatory changes, schools can be incentivized or mandated to seriously consider the costs of transportation (and cars) in determining COA. Second, federal policy could allow for negative Expected Family Contribution (“EFC”). Using inputs from the FAFSA, EFC is a formula that assesses the family’s financial circumstances and determines the amount of federal financial aid available to the student.<sup>316</sup> A student can have a \$0 EFC. Changing the EFC metrics to account for greater financial need or bidirectional family financial assistance would help students better afford the cost of college.<sup>317</sup> This could be achieved by adopting a steeper progressive curve

311. *Complete the FAFSA® Form*, FED. STUDENT AID, <https://studentaid.gov/h/apply-for-aid/fafsa#deadlines> [<https://perma.cc/EWW8-MYDV>] (last visited Jan. 28, 2023).

312. *How Financial Aid Works*, FED. STUDENT AID, <https://studentaid.gov/h/understand-aid/how-aid-works> [<https://perma.cc/JW2N-QHT9>] (last visited Jan. 28, 2023).

313. See Nancy McGuckin & Yukiko Nakamoto, *Differences in Trip Chaining by Men and Women*, in 2 RESEARCH ON WOMEN’S ISSUES IN TRANSPORTATION 49 *passim* (2005), <https://onlinepubs.trb.org/onlinepubs/conf/CP35v2.pdf> [<https://perma.cc/GTQ8-AHP9>]; see also *supra* note 14 (discussing the intersections between gender and ethnicity in transportation).

314. It is almost impossible to talk about transportation without also talking about housing access and affordability. See generally ROTHSTEIN, *supra* note 193, at 188–190 (discussing segregation and transportation). Although a thorough discussion would require significantly more space than this Article allows, one possibility is to think about cost of attendance through the lens of Housing + Transportation (H+T®), an index that the Center for Neighborhood Technology developed and advances. *Research Impact*, C.N.T., <https://cnt.org/research> [<https://perma.cc/U7KN-7AUC>] (last visited Jan. 28, 2023).

315. See *supra* notes 282–287.

316. JULIA BARNARD, JESS DORRANCE, KATE SABLOSKY ELENGOLD & DAVID ANSONG, “I WAS ON MY OWN”: RECONSIDERING THE REGULATORY FRAMEWORK FOR FAMILY SUPPORT DURING COLLEGE 2 (2019), [https://scholarship.law.unc.edu/cgi/viewcontent.cgi?article=1478&context=faculty\\_publications](https://scholarship.law.unc.edu/cgi/viewcontent.cgi?article=1478&context=faculty_publications) [<https://perma.cc/9ST4-FDXN>] (“The EFC is calculated as a percentage of a family’s total adjusted gross income, along with family size, number of children, and assets.”).

317. *Id.*; see also EDDY CONROY, SARA GOLDRICK-RAB, ROBERT KELCHEN, CARRIE R. WELSTON & MARK HUELSMAN, THE REAL PRICE OF COLLEGE: HOW USING THE NEGATIVE EXPECTED FAMILY CONTRIBUTION CAN BETTER SUPPORT STUDENTS (2021), <https://>

so that lower-income families could pay something less than 10% of their adjusted gross income and/or adopting a negative EFC that accounts for bidirectional financial support between parents and children.<sup>318</sup> As the study underlying this Article clearly showed, Latino students and their parents regularly share finances and financial worries.<sup>319</sup> Further, transportation barriers to college completion were integrally connected to family obligations for the Latino respondents.<sup>320</sup> Finally, and unsurprisingly, additional grants or free college programs would lighten the financial load on students, allowing them to procure reliable transportation.

States, cities, and municipalities also have a potential role in reducing the way that transportation acts as a barrier to higher education access and success. For urban-oriented colleges with accessible public transportation, state and local governments can, on their own or in partnership with the federal government<sup>321</sup> or local colleges, offer students discounts on public transportation. Federal legislation has been introduced that would provide competitive grants to community colleges and minority-serving institutions to partner with local public transit entities to increase transportation access to their campuses.<sup>322</sup> Transit agencies in St. Louis, Chicago, Philadelphia, Los Angeles, and Baltimore offer some form of unlimited transit programs to local universities.<sup>323</sup> At least one empirical study has found an association between transportation access and completion rates.<sup>324</sup> In Whittier, California, Rio Hondo College<sup>325</sup> partnered with the Los Angeles County

hope4college.com/wp-content/uploads/2021/05/NegativeEFC\_PolicyMemo.pdf [https://perma.cc/2NDP-Z6EU] (noting that the new Student Aid Index, which will go into effect in 2023, allows for a negative \$1500, and arguing that the SAI should go even further).

318. *Id.*

319. DREAMS INTERRUPTED, *supra* note 19, at 13 (“Rather, in recognition of the lived experiences of Latino parents and children, avoiding debt is a mechanism to protect the larger family. Much like financial and emotional support in Latino families, the protection is bidirectional, from parent to child and from child to parent.”).

320. *Id.* at 22–23.

321. The Higher Education Act provides that states can apply for persistence grants, under which the federal government pays 66.66% and the states pay the rest. 20 U.S.C. § 1070c–3a(b)(2)(A). States may provide their portion through in-kind contributions, including transportation passes. *Id.* § (b)(2)(C)(ii)(I)(bb).

322. Alexis Gravely, *A PATH to Greater Public Transit Access*, INSIDE HIGHER ED (Nov. 29, 2021) (discussing The PATH to College Act and the Build Back Better Act), <https://www.insidehighered.com/news/2021/11/29/bill-would-improve-public-transportation-access-colleges> [https://perma.cc/JT37-WJ6Z].

323. Jenna Fortunati, *American University’s Free Transit Pass Is a Success, and the Idea Is Slowly Spreading*, MOBILITY LAB (Feb. 9, 2018), <https://mobilitylab.org/2018/02/09/american-universitys-free-transit-pass-success-idea-slowly-spreading/> [https://perma.cc/8QY6-77SJ].

324. JANELLE R. CLAY & JESSA L. VALENTINE, IMPACT OF TRANSPORTATION SUPPORTS ON STUDENTS’ ACADEMIC OUTCOMES: A QUASI-EXPERIMENTAL STUDY OF THE U-PASS AT RIO HONDO COLLEGE (2021), <https://scholarshare.temple.edu/bitstream/handle/20.500.12613/6951/HopeCenter-Report-2021-09.pdf?sequence=1&isAllowed=y> [https://perma.cc/25NK-2NHD].

325. Rio Hondo College is a commuter college where 19,000 students, more than 80% of whom are Hispanic, earn primarily associate degrees and certificates. *Id.* at 3; see also *All Degree and Certificate*

Metropolitan Transportation Agency to create a discounted Universal College Student Transit Pass (“U-Pass”), resulting in students paying 95% less per semester than they previously paid.<sup>326</sup> Not only can students use that discounted pass to get to and from school, but they can use it for any transportation needs they have while they are students.<sup>327</sup> An empirical study showed that such an intervention had positive effects, including a five percentage point increase in retention,<sup>328</sup> a two and a half percentage point increase in credit attainment,<sup>329</sup> a twenty-seven percent increase in associate degree attainment, and a seventeen percent increase in overall completion.<sup>330</sup> Other schools have similarly partnered with local transit authorities.<sup>331</sup> Although some of those schools were motivated by parking and environmental benefits,<sup>332</sup> the lessons of the U-Pass study suggest that free and reduced transportation costs will also benefit college completion, with a particular benefit for students of color.<sup>333</sup>

Especially for those colleges in suburban, rural, or “college towns,” institutions have a role to play in limiting the negative effects of students’ transportation concerns. For example, at UNC-Chapel Hill, students have access to campus busses and Chapel Hill Transit, both fare-free bus service around campus and to nearby neighborhoods.<sup>334</sup> Clemson University in South Carolina offers a free shuttle to both the Greenville-Spartanburg and Charlotte-Douglas International Airports for university breaks.<sup>335</sup> For Isabella, who complained that she felt isolated from her family but could not afford to travel back and forth to see them, transportation

*Programs*, RIO HONDO COLL., <https://pathways.riohondo.edu/all-degree-and-certificate-programs/> [<https://perma.cc/33UD-5H5D>] (last visited Jan. 28, 2023).

326. Liann Herder, *Study Reveals Transportation Assistance Helps Community College Students Succeed*, DIVERSE (Sept. 2, 2021), <https://www.diverseeducation.com/institutions/community-colleges/article/15114425/study-reveals-transportation-assistance-helps-community-college-students-succeed> [<https://perma.cc/4Z62-FSWE>].

327. *Id.*

328. CLAY & VALENTINE, *supra* note 324, at 7.

329. *Id.*

330. *Id.* at 8.

331. *See Connecting Transit and Higher Education*, MASS TRANSIT (Apr. 17, 2016), <https://www.masstransitmag.com/home/article/12195804/transit-and-higher-education> [<https://perma.cc/JA2Z-63NC>] (describing a partnership between Grand Valley State University and The Rapid bus transit); *Transportation and Parking*, MARIA COLL., <https://mariacollege.edu/student-support/campus/transportation-parking> [<https://perma.cc/L767-EWKB>] (last visited Jan. 28, 2023) (describing Maria College’s partnership with Capital District Transit Authority to provide free bus fare for students).

332. *See Connecting Transit and Higher Education*, *supra* note 331.

333. CLAY & VALENTINE, *supra* note 324, at 2 (noting that community colleges like the one tested here “serve large pluralities of Hispanic and Black students”); *Id.* at 4 (noting that an overwhelmingly greater proportion of U-Pass students were Hispanic).

334. *ocal Transit*, U.N.C. FIN. & OPERATIONS, <http://move.unc.edu/transit/local-transit/> [<https://perma.cc/Y3TX-XZ7W>] (last visited Jan. 28, 2023).

335. *Airport Shuttle*, CLEMSON UNIV.: PARKING & TRANSP. SERV., <https://www.clemson.edu/campus-life/parking/transit/airport.html> [<https://perma.cc/S3CT-KSWU>] (last visited Jan. 14, 2023).

assistance would have been invaluable.<sup>336</sup> And for students at City University of New York campuses enrolled in the Accelerated Study in Associate Programs (ASAP), unlimited MetroCards make achieving the program’s goal of fifty percent graduation rate within three years possible.<sup>337</sup>

Institutions can also agitate for public transit stops on or near their college campus.<sup>338</sup> According to researchers at the SHSF, by extending existing infrastructure, an additional twenty-five percent of community colleges could (in a cost-effective way) be made accessible by public transit.<sup>339</sup> Institutions can also create “emergency grants” or “completion grants” to assist students near-completion who are struggling financially.<sup>340</sup> In a recent study on completion grants, almost one-quarter of the more than 600 surveyed students noted that safe and reliable transportation to campus was a financial challenge.<sup>341</sup> Completion grants, in various iterations, have been successful in helping get students to completion.<sup>342</sup> Finally, institutions can seek out grant funding to specifically address transportation barriers on campus. In 2019, for example, the Kresge Foundation awarded five grants to “colleges and transit agencies to identify, address and evaluate transportation solutions for students.”<sup>343</sup>

These are but a sampling of the efforts that the federal government, state and local governments, and institutions can take to address the ways that transportation law and policy negatively affects higher education equity.

#### *b. A Note on Online Education*

In the wake of the COVID-19 pandemic, many schools and students realized that online education is a possible substitute for live higher education instruction. In fact, schools all over the country have offered online courses and degrees for some time. So why isn’t online education the answer to transportation barriers in higher education?

While the complex debate about online higher education is outside the scope of this Article, it is a valid question that deserves consideration. And I approach it from the underlying goal and purpose of this work—higher education equity.

336. DREAMS INTERRUPTED, *supra* note 19, at 23.

337. *What is ASAP?*, CITY UNIV. OF N.Y., <https://www1.cuny.edu/sites/asap/about/> [<https://perma.cc/4GPQ-LGUH>] (last visited Jan. 14, 2023).

338. Other structural changes, like zoning changes that allow students to live in high-density units in greater proximity to the school, would also greatly reduce transportation barriers.

339. CRESPI, BRUECKER & SELDIN, *supra* note 144.

340. See Sara Goldrick-Rab, Travis T. York, Clare Cady & Christy Baker-Smith, *Completion Grants: A Multi-Method Examination of Institutional Practice*, 50 J. STUDENT FIN. AID, Feb. 2021, at 1, 3–4 (describing the history of completion grants and their relationship to emergency grants).

341. *Id.* at 8–9.

342. *Id.* at 2–3 (highlighting particular programs).

343. *Colleges, Transit Agencies Partner to Advance Transportation Solutions for Students in Cities*, KRESGE FOUND. (Nov. 13, 2019), <https://kresge.org/news-views/colleges-transit-agencies-partner-to-advance-transportation-solutions-for-students-in-cities/> [<https://perma.cc/KD5B-L9QY>].

Unfortunately, I am unconvinced that online education promotes equity. Rather, it can create inequitable higher education tracks. Low-quality for-profit colleges and universities dominate the online higher education market. There is no shortage of commentary, empirical evidence, and official concern about the value of a for-profit college degree.<sup>344</sup> Nor are the costs lower than traditional college education.<sup>345</sup> With an already disproportionately high number of Black and Latino students attending for-profit education,<sup>346</sup> pinning our hopes on equity through online education risks greater predation and equity gaps. In fact, early data documenting college enrollment figures during the COVID-19 pandemic show a decrease in enrollment in public community college by nine percent, compared to an increase in for-profit enrollment by three percent.<sup>347</sup>

With names like American National University, Westwood College, Berkeley College, Monroe College, and Northwestern College, it is not always easy for a student to know whether a school is a for-profit college or a non-profit college. And the lines continue to blur.<sup>348</sup> For-profit education has infiltrated even the most well-known non-profit institutions, including Harvard, Yale, Georgetown, UC Berkeley, UNC-Chapel Hill, Northwestern, Syracuse, Rice and USC.<sup>349</sup> That is because these institutions, and others, have contracted with for-profit companies called online program managers (“OPMs”) to create, manage, and sell their online degree programs.<sup>350</sup> In an exposé of OPMs, Kevin Carey explains that OPMs are an “obscure species of for-profit company that has figured out how to gouge

344. See, e.g., Kevin Carey, *The Creeping Capitalist Takeover of Higher Education*, HIGHLINE (Feb. 6, 2019); COTTOM, *supra* note 152, at 13–14 (highlighting the financial risks for those who attend for-profit colleges and universities); S. COMM. ON HEALTH, EDUC., LAB. & PENSION, FOR PROFIT HIGHER EDUCATION: THE FAILURE TO SAFEGUARD THE FEDERAL INVESTMENT AND ENSURE STUDENT SUCCESS, S. DOC. NO. 112–37 (2012), [https://www.help.senate.gov/imo/media/for\\_profit\\_report/PartI-PartIII-SelectedAppendixes.pdf](https://www.help.senate.gov/imo/media/for_profit_report/PartI-PartIII-SelectedAppendixes.pdf) [<https://perma.cc/CSF4-DA7P>].

345. Emma Kerr, *The Real Cost of For-Profit Colleges*, U.S. NEWS (Nov. 13, 2019, 11:01 AM), <https://www.usnews.com/education/best-colleges/paying-for-college/articles/the-real-cost-of-for-profit-colleges> [<https://web.archive.org/web/20210625080506/https://www.usnews.com/education/best-colleges/paying-for-college/articles/the-real-cost-of-for-profit-colleges>] (noting that four-year for-profit colleges generally charge somewhere in between public non-profit and private non-profit colleges).

346. Dyvonne Body, *Worse Off than When They Enrolled: The Consequence of For-Profit Colleges for People of Color*, ASPEN INST. (Mar. 19, 2019), <https://www.aspeninstitute.org/blog-posts/worse-off-than-when-they-enrolled-the-consequence-of-for-profit-colleges-for-people-of-color/> [[https://perma.cc/P8T4-Y\]5X](https://perma.cc/P8T4-Y]5X)] (citing the Federal Reserve Board to assert that Black and Hispanic students are three times more likely to go to a for-profit college than Whites).

347. Stephanie Riegg Cellini, *The Alarming Rise in For-Profit College Enrollment*, BROOKINGS INST. (Nov. 2, 2020).

348. Robert Shireman, *How For-Profits Masquerade as Nonprofit Colleges*, CENTURY FOUND. (Oct. 7, 2020), <https://tcf.org/content/report/how-for-profits-masquerade-as-nonprofit-colleges/?session=1> [<https://perma.cc/Q94Y-JPQU>].

349. Carey, *supra* note 344.

350. *Id.*



students in new and creative ways,” raking in at least sixty percent of the students’ tuition dollars.<sup>351</sup>

And while it may be true that online education limits physical transportation barriers for students, it does nothing to limit virtual transportation issues for students. In the wake of a mass move to online learning, research shows that one in three Black, Latino, and American Indian/Alaska Native students lack access to high-speed home internet.<sup>352</sup>

### *B. Making the Connection: Higher Education and Infrastructure and Transportation Racism*

Like the theory of automobile supremacy, inequities in transportation law and policy affect higher education equity. Historically and today, higher education law and policy has often exacerbated the inequalities in transportation and its related infrastructures.

#### *1. Higher Education and Infrastructure and Transportation Racism*

Higher education institutions have both caused and been affected by discriminatory transportation and infrastructure choices. The Morrill Act of 1862, for example, was one of the most critical moments in accelerating access to higher education in the United States.<sup>353</sup> But it was also “[o]ne of the U.S. government’s most aggressive acquisitions of Native lands.”<sup>354</sup> And scholars and advocates have carefully documented universities’ historic entanglement with slavery and forced labor.<sup>355</sup> In that way, the very built environment of higher education has relied on and exacerbated racial and ethnic disparities.

351. *Id.*

352. UNIDOSUS, STUDENTS OF COLOR CAUGHT IN THE HOMEWORK GAP (2020), [https://futureready.org/wp-content/uploads/2020/08/HomeworkGap\\_FINAL8.06.2020.pdf](https://futureready.org/wp-content/uploads/2020/08/HomeworkGap_FINAL8.06.2020.pdf) [<https://perma.cc/569M-LKSF>]; *see also* Ashley Clark, *Survey Reveals Higher Ed Students Have Inequitable Access to Reliable Broadband*, HIGHER LEARNING ADVOCS. (May 31, 2020), <https://medium.com/higher-learning-advocates/survey-reveals-higher-ed-students-have-inequitable-access-to-reliable-broadband-ab3cc152d663> [<https://perma.cc/PQ35-HMW4>] (“Access to high-speed broadband internet, affordable child care, housing, adequate financial aid: these are some of the challenges that today’s students in college faced prior to the outbreak of COVID-19, which have now been amplified by the pandemic.”).

353. Ronald J. Daniels, Philip M. Spector & Rebecca Goetz, *Fault Lines in the Compact: Higher Education and the Public Interest in the United States*, CARNEGIE REP., Winter 2014, at 73, 75, [https://higherreporter.carnegie.org/wp-content/uploads/2014/02/Daniels\\_Spector\\_Goetz\\_Fault-Lines.pdf](https://higherreporter.carnegie.org/wp-content/uploads/2014/02/Daniels_Spector_Goetz_Fault-Lines.pdf) [<https://perma.cc/LYN7-C2QM>] (The Morrill statutes “set a powerful precedent: they expanded undergraduate colleges into the university model across the United States with multiple programs beyond the liberal arts, and they enlisted the states in an effort to make higher education accessible to groups outside of the privileged elites, making them available to the working classes of the period.”).

354. Nelson, Tachine & Lopez, *supra* note 184, at 17.

355. *See* SLAVERY AND THE UNIVERSITY: HISTORIES AND LEGACIES (Leslie M. Harris, James T. Campbell & Alfred L. Brophy eds., 2019) (a collection of essays exploring the entanglements between universities and slavery).

This historical racism is not relegated to the past; racism baked into both transportation policy and infrastructure lasts well into the future.<sup>356</sup> Nor is it limited to the inequities that arise from forcing students of color to attend institutions and buildings named after or otherwise celebrating slaveholders or slavery supporters.<sup>357</sup>

Rather, there is evidence that, in large part because of the mid-twentieth century urban renewal craze, transportation infrastructure and the built environment surrounding colleges and universities have physically and psychologically separated colleges and universities from communities of color and low-income communities. This makes it harder for students of color to easily access a college education.

North Nashville, in Tennessee, offers a prime example. When Interstate 40 was built in the late 1960s, it cut through a Black business district, cutting off three HBCUs from each other, interfering with both educational access and community building.<sup>358</sup> That decision “decimated the commercial corridor and displaced business owners and residents.”<sup>359</sup> Such displacement can cause “root shock,” a “traumatic stress reaction to the destruction of one’s emotional ecosystem.”<sup>360</sup> Root shock negatively affects those displaced, and the negative repercussions reverberate long into the future.<sup>361</sup> The effects of Interstate 40’s placement had direct and lasting effects on opportunities available to North Nashville residents. Today, North Nashville is “one of the most economically precarious locations in the metropolitan areas,” with a forty-two percent poverty rate; more than ninety percent of its residents are Black.<sup>362</sup> Not only does that disproportionately high poverty rate affect employment and incarceration rates, but

356. See Schindler, *supra* note 20.

357. See generally Alfred L. Brophy, *Thomas Ruffin: Of Moral Philosophy and Monuments*, 87 N.C. L. REV. 799 (2009) (exploring Judge Thomas Ruffin’s opinions on slavery and emancipation in light of the University of North Carolina dormitory that bears his name); Aaron Schwabach, *Thomas Jefferson, Slavery, and Slaves*, 33 T. JEFFERSON L. REV. 1 (2010) (analyzing the value of using Thomas Jefferson’s name as a newly-renamed law school in 2005); Leah D. Williams, *A Name Change May Be a Start, but It Is Not Enough*, 77 WASH. & LEE L. REV. ONLINE 59, 63 (2020) (“It should be a given that any institution that espouses itself to be a welcoming place for all people should not cling to, in name, reverence, or tribute, any persons who have committed crimes against humanity.”).

358. *White Men’s Roads*, *supra* note 20, at 1295 (asserting that, in addition, I-40 in Nashville “physically constrained the future growth of three [other HBCU] institutions” (citing Raymond A. Mohl, *Citizen Activism and Freeway Revolts in Memphis and Nashville: The Road to Litigation*, 40 J. URB. HIST. 870, 880 (2014))); see also Andre M. Perry & Anthony Barr, *To Restore North Nashville’s Black Middle Class, Local Policymakers Should Pursue Reparations*, BROOKINGS INST. (July 2, 2021), <https://www.brookings.edu/research/to-restore-north-nashvilles-black-middle-class-local-policymakers-should-pursue-reparations/> [<https://perma.cc/BH24-GQJV>]; Campbell Haynes, *One Mile North*, 8 BELMONT L. REV. 1, 3–4 (2020) (describing how a 2.5 mile “kink” in I-40 in North Nashville caused “immense damage” to Black Nashville, including by physically separating “three pillars of the black community: Fisk University, Meharry Medical College, and Tennessee A&I University”).

359. Perry & Barr, *supra* note 358; see also MINDY THOMPSON FULLILOVE, *ROOT SHOCK: HOW TEARING UP CITY NEIGHBORHOODS HURTS AMERICA, AND WHAT WE CAN DO ABOUT IT* (2016).

360. FULLILOVE, *supra* note 359, at 11.

361. *Id.* at 17.

362. Perry & Barr, *supra* note 358.

it depresses college attendance and attainment: North Nashville's college attainment rate is thirty percent, thirteen percentage points below the state's average.<sup>363</sup> In addition to other factors, transportation barriers rate highly among the area students' barriers to higher education.<sup>364</sup>

The way that the built environment, including transportation infrastructure, affects higher education equity is not limited to Nashville. In Syracuse, New York, Interstate 81 is widely recognized as a six-lane "line of demarcation" between racially segregated communities.<sup>365</sup> But the interstate also separates University Hill, which includes Syracuse University and some of the schools in the State University of New York system, from lower-class communities of color.<sup>366</sup> And in Washington D.C., Georgetown University sits in the heart of Georgetown, where citizens have long been opposed to public transit, a choice that has significant racial undertones.<sup>367</sup> Well into the twenty-first century, Georgetown residents complained about Georgetown University's shuttle system, cajoling the University into rerouting the shuttle, causing longer commutes for those who cannot afford to live in or drive to Georgetown.<sup>368</sup> Where colleges are built and the ways that students access those institutions affect college success and completion. Interstates, roads, bridges, bus lines, and parking create access or burden access to those institutions. Historically, as shown by the examples of North Nashville and Syracuse,<sup>369</sup> these decisions have burdened access to education for students of color. Thus, if higher education institutions are serious about educational equity, they must address their place in transportation racism and architectural exclusion.

## 2. Possibilities for Change – Infrastructure and Transportation Racism

The federal government, through twin policy—the Housing Act of 1949 and the Federal Aid Highway Act of 1956—displaced at least 1,600 Black

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363. *Id.*; see also ROSS BAIRD, BRUCE KATZ, JIHAEE LEE & DANIEL PALMER, TOWARDS A NEW SYSTEM OF COMMUNITY WEALTH 12 (2019), [https://drexel.edu/~media/Files/nowak-lab/Drexel\\_NMFL\\_CommunityWealth\\_Final.ash](https://drexel.edu/~media/Files/nowak-lab/Drexel_NMFL_CommunityWealth_Final.ash) [<https://perma.cc/6H6P-HLTW>] (explaining how Shelby Park, Louisiana was negatively affected by the construction of Interstate 65, which has had a sustained effect, and by 2010, the majority African American community found fifty-two percent of its population in poverty and only twenty percent held a higher education degree).

364. *Id.*

365. *Transportation Policy*, *supra* note 20, at 2139–40; see also *White Men's Roads*, *supra* note 20, at 1293 ("Housing for poor families remains crowded around I-81's elevated overpass, and nearly two-thirds of poor Black people . . . [and] sixty-two percent of Latinx live in high-poverty neighborhoods.").

366. *Transportation Policy*, *supra* note 20, at 2139–40.

367. Katya Schwenk, Opinion, *Branching Out: Georgetown's Campaign Against Public Transport*, GEO. VOICE (Dec. 7, 2018), <https://georgetownvoice.com/2018/12/07/branching-out-georgetown-campaign-against-public-transport/> [<https://perma.cc/NL3N-ASPW>] (explaining the history of Georgetown's alleged crusade against public transportation).

368. *Id.*

369. See *supra* notes 364–368.

neighborhoods;<sup>370</sup> Latino neighborhoods were also heavily affected.<sup>371</sup> Higher education policy has done little to ease the burdens that transportation created for students, and, in some cases, has exacerbated the challenges. Federal, state, and local governments, as well as institutional actors, could turn to higher education choices to limit the negative effects of transportation law and policy on students.

Policymakers and institutions should consider physical changes that can positively affect those with transportation burdens. For example, on the one hand, if colleges and universities expand or alter their physical footprint, they should consider transportation access in those decisions. On the other hand, institutions can use their substantial political power (both individually and collectively) to agitate for increased public transit access to their campuses and push back against neighborhood complaints about public transportation.

Governments and institutions can also invest in communities that have been hardest hit by transportation and built environment racism, especially understanding its long-term effects on educational equity. For example, in North Nashville, Perry and Barr propose that “policymakers at the state and local level need to reinforce the Chamber’s good faith efforts by investing in wealth-building opportunities directly, particularly for those North Nashville residents whose families experienced the devastating effects of the construction of I-40.”<sup>372</sup> Colleges and universities, with their more than \$400 billion collective endowments and positions as communities anchors,<sup>373</sup> can similarly invest in nearby communities that have been hardest hit by transportation and infrastructure racism. With its \$5.55 billion endowment, for example, Duke University invested \$4 million in the Durham-based Latino Community Credit Union and \$8 million in the Durham-based Self-Help Credit Union.<sup>374</sup> The University of Cincinnati dedicated nearly \$150 million of its endowment to finance low-interest loans and operating grants for community redevelopment efforts.<sup>375</sup> And Syracuse University gave almost \$14 million for a comprehensive neighborhood revitalization effort.<sup>376</sup> Although the ultimate effects of such giving are beyond the scope of this Article, the point is that universities and colleges have opportunities to use their wealth and influence to positively

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370. FULLILOVE, *supra* note 359 at 20.

371. See Liam Dillon & Ben Poston, *The Racist History of America’s Interstate Highway Boom*, L.A. TIMES (Nov. 11, 2021, 3:00 AM), <https://www.latimes.com/homeless-housing/story/2021-11-11/the-racist-history-of-americas-interstate-highway-boom> [<https://perma.cc/9DE9-8XY2>] (“At multiple points, the east-west path of Interstate 10 through Los Angeles County gobbled up distinct Black and Latino neighborhoods.”).

372. Perry & Barr, *supra* note 358.

373. JOE GUINAN, SARAH MCKINLEY & BENZAMIN YI, RESPONSIBLE ENDOWMENTS COALITION AND THE DEMOCRACY COLLABORATIVE, RAISING STUDENT VOICES: STUDENT ACTION FOR UNIVERSITY COMMUNITY INVESTMENT 7 (2013).

374. *Id.* at 18.

375. *Id.*

376. *Id.* at 19.

affect neighborhoods that have been negatively affected by infrastructure and transportation policy choices.

*C. Making the Connection: Higher Education and Car Buying and Lending*

Although car buying and lending feel removed from the college experience, higher education policy has the potential to either exacerbate or mitigate the unequal effects of the car buying and lending industry.

*1. Higher Education and Car Lending and Buying*

It is worth noting, once again, that the Higher Education Act does not permit institutions to count the cost of a car in its cost of attendance calculations.<sup>377</sup> Thus, considering the disparities in short- and long-term costs for car buyers of color, higher education law's failure to permit those students to borrow for their car doubles down on the negative and racially disparate effects.

But this is not the only place where higher education law and policy negatively affect car owners. Analyzing a large dataset from the Consumer Bankruptcy Project, Professors Pamela Foohey, Robert M. Lawless, and Deborah Thorne hypothesize that "people use bankruptcy to save their cars."<sup>378</sup> As expected after the data provided above, African American debtors arrive at the consumer bankruptcy system "with more expensive cars and larger auto loans."<sup>379</sup> Debtors, the trio suggest, must turn to bankruptcy to save their cars "because of the importance of the cars as access to jobs, schooling, and health care."<sup>380</sup> And the debtors are able to keep their cars because they can discharge their other debts.<sup>381</sup>

What does this have to do with higher education law and policy? Consumer bankruptcy was designed, at least in part, to give the consumer a fresh start.<sup>382</sup> Yet, student loan debt is very rarely dischargeable in bankruptcy.<sup>383</sup> In fact, over time, Congress has made it more and more difficult to discharge student debt in bankruptcy.<sup>384</sup> So, in bankruptcy law, we see the structures of auto lending and student loan lending intersect. Because of the bankruptcy system's failure to allow

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377. See *supra* Section I.V.

378. *Driven to Bankruptcy*, *supra* note 20, at 315.

379. *Id.* at 328.

380. *Id.* at 315.

381. *Id.* at 321.

382. Creola Johnson, *Crushed by COVID-19 Medical Bills, Coronavirus Victims Need Debt Relief Under the Bankruptcy Code and Workers' Compensation Laws*, 125 PENN. ST. L. REV. 453, 476 (2021).

383. Elengold, *supra* note 3, at 19–20. The Department of Education recently announced regulatory changes that will ostensibly make it easier to discharge student loans in bankruptcy. See Gabriel T. Rubin, *Biden Administration to Make It Easier to Dismiss Student Loans in Bankruptcy*, WALL ST. J. (Nov. 17, 2022, 4:27 PM), <https://www.wsj.com/articles/biden-administration-to-make-it-easier-to-dismiss-student-loans-in-bankruptcy-11668706819> [<https://perma.cc/CD7Z-H37W>].

384. *Id.* (describing the legislation); see also John Patrick Hunt, *Help of Hardship?: Income-Driven Repayment in Student-Loan Bankruptcies*, 106 GEO. L.J. 1287, 1300–12 (2018).

student loan debtors to discharge their debt in bankruptcy, debtors cannot discharge critical debt necessary to keep their cars.<sup>385</sup> And, because debtors of color are more likely to be stuck with both higher auto debt and higher student loan debt, the bankruptcy system fails to provide those debtors with the fresh start it purportedly promises.

### 2. Possibilities for Change – Car Lending and Buying

Changes to the laws affecting higher education would positively affect those students caught in the web of car lending and buying. In addition to changing the cost of attendance policies to account for purchasing a car, the bankruptcy rules should be amended to allow debtors to discharge student loans in bankruptcy.<sup>386</sup>

There may be other possibilities as well. Colleges and universities have partnered with lending entities for various reasons, for example, to offer a campus credit card.<sup>387</sup> Although there are concerns with the incentives and regulatory guidance around those practices,<sup>388</sup> colleges and universities regularly partner with private institutions to provide services and products to their students. With appropriate regulatory requirements and oversight, higher education institutions could facilitate non-discriminatory access to car buying and lending. Colleges and universities may also implement their own methods of selling used cars in a non-discriminatory way and with the recognition that their community members need car access.<sup>389</sup> Along similar lines, institutions could use their size and community standing to negotiate volume discounts from local reputable auto repairs and dealers on behalf of their students.

## CONCLUSION

Michelle's college experience highlights how transportation law and policy can topple a student's college Jenga® tower. Michelle's car troubles, combined with her difficulty accessing reliable and convenient public transportation, exemplify automobile supremacy's paradigm and underlie some of the issues with car buying

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385. *Driven to Bankruptcy*, *supra* note 20, at 315.

386. *See, e.g.*, Daniel A. Austin, *The Indentured Generation: Bankruptcy and Student Loan Debt*, 53 SANTA CLARA L. REV. 329, 415–20 (2013) (proposing that the Bankruptcy Code be amended to make student loan debt dischargeable in bankruptcy).

387. SARAH BAKER, STEFAN MALETIC, BRENDAN MORRISSEY & SYDNEY TENG, MEMORANDUM RE: CAMPUS DEBIT AND PREPAID CARDS AND THE BEST FINANCIAL INTEREST STANDARD 2 (2021), <https://protectborrowers.org/wp-content/uploads/2021/05/SBPC-UNC-Legal-Memo.pdf> [<https://perma.cc/WSJ3-69GE>].

388. *Id.* (detailing concerns).

389. *See, e.g.*, Sylvia Goodman, 'One Flat Tire Away': How a Rural Community College Makes Sure Its Students Get to Their Classes, One Car at a Time, CHRON. HIGHER EDUC. (Oct. 11, 2022), <https://www.chronicle.com/article/one-flat-tire-away> [<https://perma.cc/HD3M-R3GW>] (explaining how Lenoir Community College's foundation created Cars for College, which assists working students in buying cars for an average of \$3,080, including by refurbishing cars through the institution's automotive program and guaranteeing loans through partnership with a local credit union).

and lending. The locations of her college campuses, only some of which offered necessary courses, show the ways that transportation interacts with the built environment to make college harder. And the two interstates that abut Michelle's Florida college campus have been subjected to complaints that they displaced vulnerable people, decreased public transportation access, and destroyed Black and Latino communities.<sup>390</sup>

In Michelle's case, the laws that scaffold the notion of automobile supremacy, transportation racism, the built environment, and car buying and lending negatively affected Michelle's everyday life, including her ability to succeed in higher education. Those barriers were exacerbated, rather than mitigated, by higher education law and policy. It was the intersection of those structures—transportation and higher education—that ultimately tumbled Michelle's college Jenga® tower.

Transportation scholarship is a critical and growing area, especially in legal analysis.<sup>391</sup> And education law scholars have long concerned themselves with equity in higher education.<sup>392</sup> It is critical to connect the dots between these two structural systems. This Article does just that, beginning an important conversation about how higher education law, policy, and programming can alleviate, rather than exacerbate, transportation barriers to promote equitable access to college and its social, emotional, and financial rewards.

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390. Erica Thompson, *How Highways Destroyed Black Neighborhoods in the '60s, as Told by Elders Who Were There*, COLUMBUS DISPATCH (Dec. 3, 2020, 3:00 AM), <https://www.dispatch.com/in-depth/lifestyle/2020/12/03/black-columbus-ohio-homes-impact-highways-east-side/3629685001/> [<https://perma.cc/7LVC-9MYW>] (describing how the construction of I-70 destroyed Black neighborhoods in Columbus, OH); Tayler Shaw, Lauren Smith, Tory Lysik & Carol McKinley, *Denver's Central 70 Project: Digging in Troubled Ground*, GAZETTE (Feb. 14, 2022), [https://gazette.com/news/local/denvers-central-70-project-digging-in-troubled-ground/article\\_ed4fe09c-4eb9-11eb-806d-6fad58e688fd.html](https://gazette.com/news/local/denvers-central-70-project-digging-in-troubled-ground/article_ed4fe09c-4eb9-11eb-806d-6fad58e688fd.html) [<https://perma.cc/T4GY-Q745>] (describing how the construction of I-70 in Denver, Colorado tore through working-class Hispanic communities, which “resulted in the loss of hundreds of tidy little immigrant-built homes that lined the streets there”); Nadege Green, *How I-95 Shattered the World of Miami's Early Overton Residents*, WLRN 91.3 FM (Sept. 24, 2013, 10:43 AM), <https://www.wlnm.org/news/2013-09-24/how-i-95-shattered-the-world-of-miamis-early-overtown-residents> [<https://perma.cc/LTV6-CKW9>] (describing the way that construction of I-95 in Miami razed the Black neighborhood called Overtown); Alanna Catherine Stewart, *The Construction of Interstate-95: A Failure to Preserve a City's History* (2011) (Master's thesis, University of Pennsylvania), [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1179&context=hp\\_theses](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1179&context=hp_theses) [<https://perma.cc/62R6-NTFH>] (“The construction of the interstate spurred negative effects in American cities, especially [I-95] in Philadelphia. The interstate system helped to ‘continue the downward spiral of public transportation and virtually guaranteed that future urban growth would perpetuate a centerless sprawl’”).

391. See sources cited *supra* note 20.

392. See, e.g., Osamudia R. James, *Business as Usual: The Roberts Court's Continued Neglect of Adequacy and Equity Concerns in American Education*, 59 S.C. L. REV. 793 (2008); Erika K. Wilson, *The New School Segregation*, 102 CORNELL L. REV. 139 (2016); Jonathan D. Glater, *Forward: Barriers to Higher Education Access*, 7 U.C. IRVINE L. REV. 1 (2017).

APPENDIX A: PHASE I METHODS AND LIMITATIONS<sup>393</sup>

## A. METHODS

**Survey:**

The participants in this project were recruited from an online panel purchased from and administered by Qualtrics, an American experience management company with co-headquarters in Provo, Utah and Seattle, Washington.<sup>394</sup> Qualtrics screened survey respondents based on three key eligibility criteria: (1) You are between the ages of 18 and 40; (2) You attended one or more “college” program(s) (“college” defined as community college, college, university, trade school, or certificate program), but never completed a degree/certificate; and (3) You currently are not enrolled in a college program.

After development, we pilot tested the survey with more than 600 subjects through a Qualtrics online survey panel. We fielded the final survey through Qualtrics.<sup>395</sup> Although we attempted to collect 1,000 surveys from Latino respondents and 1,000 surveys from non-Latino respondents, we were only able to get 1,007 surveys of those who did not identify as Latinos and 561 surveys of those who did identify as Latinos. We dropped sixty-one ineligible survey responses, primarily because they were not U.S. citizens or Legal Permanent Residents. We limited our survey to U.S. Citizens and Legal Permanent Residents because those are the individuals eligible for federal student loans. This resulted in a total of 1,507 survey responses, thirty-five percent of whom self-identified as “Spanish, Hispanic, or Latinx.” For a copy of the survey instrument, please contact Kate Elengold at [elengold@email.unc.edu](mailto:elengold@email.unc.edu).

**National Comparisons:**

It is important to situate this work and these data in a larger context, as compared to national data. To do this, we accessed data from National Center for Education Statistics’ (NCES) DataLab, from the Beginning Postsecondary Students (BPS) survey. Using the PowerStats data analysis tool, we accessed BPS data for the most recent years available (2012/2017). The BPS includes 22,500 total respondents and tracks hundreds of variables and outcomes, including persistence and degree attainment, which is of particular importance for this research.

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393. This appendix was adapted from DEBT, DOUBT, AND DREAMS, *supra* note 22, app. A at 34–37.

394. *Panels & Samples*, QUALTRICS XM, <https://www.qualtrics.com/research-services/online-sample/> [https://perma.cc/T552-ZTUD] (last visited Jan. 28, 2023).

395. Qualtrics is a recognized and accepted way for researchers to field a survey. *See* Miriam F. Weismann, *The Missing Metrics of Sustainability: Just How Beneficial Are Benefit Corporations?*, 42 DEL. J. CORP. L. 1, 23 (2017) (using Qualtrics to field a survey); Muriel Niederle & Alvin E. Roth, *Philanthropically Funded Heroism Awards for Kidney Donors?*, 77 LAW & CONTEMP. PROBS. 131, 134–35 (2014) (same); Adam J. Hirsch, *Waking the Dead: An Empirical Analysis of Revival of Wills*, 53 U.C. DAVIS. L. REV. 2269, 2288 n.90 (2020) (same).



To offer the best national comparison with our sample, we reported BPS data including only individuals who did not attain a degree as of June 2017 and were not currently enrolled. We did not utilize filters for any variables. The BPS data is measured six years after college enrollment, which likely skews variables such as income and marital status. When appropriate, we created categories for some continuous variables, such as number of children and total loan amounts, that match the categorical response options in our survey.

There are many similarities in the variables collected in our study and in the BPS, but there are also some important differences. In addition to the time of data collection, we note that our survey sample is limited to people ages eighteen to forty; the BPS does not have age restrictions. Some variables, such as household income, are not reported in the same way in our survey and the BPS; therefore, we use the annual salary variable from the BPS as a comparison to total household income as it is the closest approximation to our income variable.

**Sample Demographics**

	<b>Latino</b>	<b>Non-Latino</b>	<b>Full Sample</b>	<b>National<sup>396</sup></b>
<b>Gender</b>	Female: 76% Male: 23% Nonbinary: 1%	Female: 74% Male: 25% Nonbinary: 1%	Female: 75% Male: 24% Nonbinary: 1%	Female: 52% Male: 48% Nonbinary: N/A
<b>Race</b>	American Indian/ Alaskan Native: 5% Asian: 1% Black/African American: 7% Native Hawaiian/ Pacific Islander: <1% White/Caucasian: 46% Mixed Race: 13% Other: 28%	American Indian/ Alaskan Native: 2% Asian: 5% Black/African American: 14% Native Hawaiian/ Pacific Islander: 1% White/Caucasian: 72% Mixed Race: 5% Other: 2%	American Indian/ Alaskan Native: 3% Asian: 4% Black/African American: 12% Native Hawaiian/ Pacific Islander: <1% White/Caucasian: 63% Mixed Race: 8% Other: 11%	American Indian/ Alaskan Native: 3% Asian: 3% Black/African American: 21% Native Hawaiian/ Pacific Islander: 2% White/Caucasian: 66% Mixed Race: 5% Other: N/A
<b>Latino</b>			Latino: 35% Non-Latino: 65%	Latino: 20% Non-Latino: 80%
<b>Household Income</b>	Less than \$25,000: 34% \$25,000–\$50,000: 38% \$50,001–\$75,000: 16% \$75,001–\$100,000: 5% \$100,001–\$150,000: 5% More than \$150,000: 2%	Less than \$25,000: 34% \$25,000–\$50,000: 30% \$50,001–\$75,000: 16% \$75,001–\$100,000: 10% \$100,001–\$150,000: 6% More than \$150,000: 2%	Less than \$25,000: 34% \$25,000–\$50,000: 33% \$50,001–\$75,000: 17% \$75,001–\$100,000: 8% \$100,001–\$150,000: 6% More than \$150,000: 2%	Less than \$25,000: 52% \$25,000–\$50,000: 41% \$50,001–\$75,000: 5% \$75,001–\$100,000: 1% \$100,001–\$150,000: 1% More than \$150,000: 1%
<b>Marital Status</b>	Divorced: 3% Married/ living with partner: 39% Never married: 58% Separated: 1% Widowed: 0%	Divorced: 4% Married/ living with partner: 44% Never married: 50% Separated: 2% Widowed: 1%	Divorced: 4% Married/ living with partner: 42% Never married: 53% Separated: 2% Widowed: <1%	Divorced: 3% Married/ living with partner: 29% Never married: 66% Separated: 2% Widowed: <1%
<b>Children</b>	None: 1: 19% 2: 13% 3: 10%	None: 54% 1: 18% 2: 15% 3: 12%	None: 55% 1: 18% 2: 15% 3: 12%	None: 1: 19% 2: 12% 3: 10%
<b>First-Generation American</b>	9%	3%	5%	18%

396. U.S. DEP'T EDUC., NAT'L CTR. EDUC. STAT., 2012/17 BEGINNING POSTSECONDARY LONGITUDINAL STUDY (BPS:12/17).

## Additional Characteristics

	Latino	Non-Latino	Full Sample	National*
First-Generation College Student	44%	31%	35%	46%
Institution Type	Certificate: 10% 4-year: 34% 2-year: 55% other: 2%	Certificate: 8% 4-year: 41% 2-year: 50% other: 2%	Certificate: 9% 4-year: 38% 2-year: 52% other: 2%	Certificate: 9% 4-year: 38% 2-year: 52% other: 2%
No. of Institutions	1: 69% 2: 25% 3 or more: 2%	1: 65% 2: 26% 3 or more: 9%	1: 67% 2: 25% 3 or more: 8%	1: 65% 2: 25% 3 or more: 10%
Intent to Re-Enroll	40%	35%	37%	N/A
Used Loans	45%	50%	48%	50%
Loan Amounts	\$100-\$5,000: 22% \$5,001-\$15,000: 35% \$15,001-\$25,000: 22% \$25,001-\$50,000: 13% \$50,001-\$75,000: 8% \$75,001-\$100,000: 0% More than \$100,000: 0%	\$100-\$5,000: 21% \$5,001-\$15,000: 34% \$15,001-\$25,000: 20% \$25,001-\$50,000: 16% \$50,001-\$75,000: 7% \$75,001-\$100,000: 1% More than \$100,000: <1%	\$100-\$5,000: 21% \$5,001-\$15,000: 35% \$15,001-\$25,000: 21% \$25,001-\$50,000: 15% \$50,001-\$75,000: 7% \$75,001-\$100,000: 1% More than \$100,000: <1%	\$100-\$5,000: 29% \$5,001-\$15,000: 41% \$15,001-\$25,000: 15% \$25,001-\$50,000: 12% \$50,001-\$75,000: 2% \$75,001-\$100,000: <1% More than \$100,000: <1%

**Analysis:**

TTEST and Chi Squared notations are marked in the text. For the two models run, the logistic regression is in the charts below.

**Logistic Regression Model of Barriers**

	Log-Odds	Effects on Odds	p-value
<b>Latino (Intercept)</b>	-1.6034		***
<b>Had Transportation Problems</b>	0.1713	1.187	**
<b>Cost of Schooling</b>	0.2025	1.225	**
<b>Sudden Change in Personal or Family Finances</b>	0.0421	1.043	Ns
<b>Didn't Want to Take on (More) Loans</b>	-0.0313	0.9669	Ns
<b>Had to Spend Hours Working</b>	0.0441	1.045	Ns
<b>Chi-Square (df)</b>	43.78(5)	48%	***

\*\*\* p<.0001; \*\*p<.01; ns=non-significant

**Logistic Regression Model of Financial Distress**

	Log-Odds	Effects on Odds	p-value
<b>Latino (Intercept)</b>	-2.2005		***
<b>Chose School Based on Cost/Tuition</b>	0.4727	1.604	***
<b>Chose School Based on Location</b>	0.0094	1.009	Ns
<b>Lived at Home While in School</b>	0.1966	1.217	Ns
<b>Worked While in School</b>	-0.0191	0.981	Ns
<b>Went Hungry While in School</b>	0.1312	1.140	Ns
<b>Did Not Have a Stable Place to Live</b>	0.2184	1.244	
<b>Chi-Squared (df)</b>	33.830(6)		***

\*\*\* p<.0001; \*\*p<.01; ns=non-significant

**B. LIMITATIONS**

First, this is a convenience-based online survey meaning that our data is not nationally representative. Although an online survey was more likely to reach our low-incidence population, convenience samples of minorities can be unreliable.<sup>397</sup> Importantly, our sample is heavily skewed female; almost seventy-five percent of the respondents self-identified as female. Further, although our self-administered questionnaire may moderate the bias, research shows that non-Latinos tend to err on the side of agreement with survey questions.<sup>398</sup>

We also chose a convenience-based sampling method because Latinos in the United States are considered a “hard-to-reach” population. Further complicating

397. Matt A. Barreto, Lorrie Frasure-Yokley, Edward D. Vargas & Janelle Wong, *Best Practices in Collecting Online Data with Asian, Black, Latino, and White Respondents: Evidence from the 2016 Collaborative Multiracial Post-Election Survey*, 6 POL. GRPS. & IDENTITIES 171, 172 (2018).

398. Lu Ann Aday, Grace Y. Chiu & Ronald Andersen, *Methodological Issues in Health Care Surveys of the Spanish Heritage Population*, 70 AM. J. PUB. HEALTH 367, 373 (1980).

data collection, our population is a “low incidence” population, “a group of individuals who share a common characteristic and make up a relatively small proportion of the broader population.”<sup>399</sup> To increase the number of respondents and best understand the studied population, we partnered with UnidosUS, a known and trusted Latino-serving organization.<sup>400</sup>

Second, we limited our sample population to those aged eighteen to forty because (1) there has been a recent surge in Latino college enrollment; (2) the financial aid landscape has changed dramatically in the last few decades; and (3) the American Latino population is significantly younger than the non-Latino American population.<sup>401</sup> Limiting ourselves to this population, however, does not allow our data to capture the significant number of adults returning to college. Because our survey omits those voices, it calls for additional research targeting returning students.

Third, the survey asks respondents to self-report about the barriers that contributed to their need to drop out of their higher education program. This asks for both a self-analysis and a backward-looking assessment.<sup>402</sup> Thus, it cannot be re-tested, and it remains subjective.

Fourth, we recognize that Latinos in the United States are not a monolithic group. A first-generation immigrant might not have the same experience as a second- or third-generation immigrant. A Latino who traces his roots to Mexico may have a different experience than a Latino who traces his roots to Colombia. Finally, we recognize that, by including all races in the non-Latino category, the results are different than they would be if we measured Latinos against non-Latino Whites. Based on previous research, we anticipate that would have shown even greater differences.<sup>403</sup>

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399. Justin A. Berry, Youssef Chouhoud, & Jane Junn, *Reaching Beyond Low-Hanging Fruit: Surveying Low-Incidence Populations*, in THE OXFORD HANDBOOK OF POLLING AND SURVEY METHODS 182 (Lonna Rae Atkeson & R. Michael Alvarez eds., 2018).

400. Michelle O’Hegarty, Linda L. Pederson, Stacy L. Thorne, Ralph S. Caraballo, Brian Evans, Leslie Athey & Joseph McMichael, *Customizing Survey Instruments and Data Collection to Reach Hispanic/Latino Adults in Border Communities in Texas*, 100 AM. J. PUB. HEALTH SUPP. S159 (2010) (finding that, in one Latino population in Texas, a targeted, carefully designed survey, paired with outreach from a culturally-trained and trusted source, increased participation)

401. Compare U.S. CENSUS BUREAU, 2013 AMERICAN COMMUNITY SURVEY 1-YEAR ESTIMATES, tbl.B01002H (Median Age by Sex (White Alone, Not Hispanic or Latino)), *with id.*, at tbl.B01002I (Median Age by Sex (Hispanic or Latino)).

402. GOLDRICK-RAB & KELCHEN, *supra* note 105; Eva Marie Kane, *The Effects of Student Financial Contributions Toward Their Post-Secondary Educational Experience*, 9 J. ON EDUC. PSYCH. 1, 5 (2016).

403. See *supra* Section III.B. (detailing the inequalities in higher education for vulnerable populations, including for students of color, not exclusive to Latino students).

APPENDIX B: PHASE II METHODS AND LIMITATIONS<sup>404</sup>

## A. METHODS

**Interviews:**

The participants in this project were drawn from the original survey sample, focusing exclusively on those who identified as Latino. Consistent with IRB requirements, the survey asked each participant if he/she/they would be willing to be contacted for a follow-up interview. 508 of the 1,507 participants agreed to be contacted for an interview and provided their contact information. Of those, 200 self-identified as “Spanish, Hispanic, or Latinx.” Of those 200, we identified 184 unique email addresses.

Using an outreach email and a follow-up email approved by the IRB, we reached out to each of the 184 email addresses, inviting them to participate in a thirty to forty-five-minute virtual interview. We sent email invitations over the course of five weeks, beginning approximately nine months after completing the survey. As a thank you, we promised that each participant that completed an interview would receive a thirty-dollar Amazon gift card. We sent both emails to each email address at least twice. We asked interested participants to sign up for an interview slot using Calendly. Twenty-four people scheduled and completed interviews. Each interview was conducted using a semi-structured interview guide by one of two research team members. Each interview was audio recorded using Zoom or a handheld recorder and then professionally transcribed.

The researchers used a pragmatic, inductive analytical approach to understand and develop themes that arose across interviews.<sup>405</sup> An inductive approach privileges emerging topics in the data, rather than imposing a pre-existing theory onto the data. The same two members of the research team then coded the interviews in three different ways. Coding consisted of applying condensed descriptive topics to text segments in order to distill the twenty-four interviews to analyzable topics across data. The researchers also created short field memos for each interview shortly after the interview. The researchers then used Dedoose to code the interviews across several dimensions, including aversion to debt, barriers to completion, types of costs, and family-related topics. The researchers reviewed each interview on its own and also identified themes across transcripts. Themes were higher-level concepts that tied together several topics (e.g., emotions and barriers) to tell a more comprehensive story across the data. Further, the interviewer assessed when and where codes co-occurred to identify the way the codes shared meaning—such as particular attitudes and actions. Finally, the researchers created a mixed-methods matrix to identify themes across certain demographics. The

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404. This appendix was adapted from DREAMS INTERRUPTED, *supra* note 19, app. A at 32–36.

405. SAVIN-BADEN & MAJOR, *supra* note 96, at 356–73.

researchers used a pragmatic inductive analytical approach to understand and develop themes that arose across interviews.

For a copy of the interview guide, please contact Kate Elengold at [elengold@email.unc.edu](mailto:elengold@email.unc.edu).

It is neither possible nor productive to view qualitative data such as the interviews conducted here in terms of quantitative metrics or attempt to understand the data as statistically representative. Therefore, we present the demographics of the interview sample for informational purposes only—to demographically describe the participants—and to identify certain limitations in the data and findings.

#### Interview Participant Demographics

Gender	Female	N=21	88%
	Male	N=3	12%
	Nonbinary	N=0	N/A
Current Age	21–35	N=4	17%
	26–30	N=4	17%
	31–35	N=9	38%
	36–40	N=6	25%
	40 or older	N=1	4%
First-Generation Student	Yes	N=17	71%
	No	N=7	29%
Age at Matriculation	17–18	N=15	63%
	19–20	N=3	12%
	21–22	N=3	12%
	23–24	N=1	4%
	25 or older	N=2	8%
Used Loans	Yes	N=13	54%
	No	N=11	46%
Worked in School	Yes	N=18	75%
	No	N=6	25%
Lived on Campus	Yes	N=1	4%
	No	N=23	96%
Attempted College More Than Once	Yes	N=13	54%
	No	N=11	46%
Institution Types	Certificate	N=2	8%
	Associate's Degree	N=16	67%
	Bachelor's Degree	N=6	25%
Length of Enrollment	Less than 6 months	N=4	17%
	6 months–1 year	N=2	8%
	1–2 years	N=14	58%
	2–3 years	N=3	13%
	More than 3 years	N=1	4%

\*When a participant attempted more than one college program, all of the data presented in the above table are representative of the participant's first attempt.

### B. LIMITATIONS

First, as noted above, this is a qualitative study, meaning that our data is not nationally representative. Similar to the survey data, our interview sample is heavily skewed female; nearly ninety percent of the respondents self-identified as female.

We contacted 184 individuals, via email, on at least four separate occasions. We had a low response rate to the email invitation, especially as the invitations went out further and further from the survey. We also had a number of individuals sign up for an interview and then fail to show up. We followed up with those individuals via email and were able to reschedule some, but not all. While we limited our outreach to email for reasons related to convenience, IRB approval, and the fact that all of our communications up until that point were electronic, we may have reached more individuals had we called them or otherwise reached out in a different format. We used this purposive sampling technique, which led to twenty-four interviews. This was a sufficient number to provide data to reach saturation on the reported themes.

Our sample was also limited in the same ways that our quantitative data was limited. We began with a purposive-based sampling method from the original survey sample. We set a limitation on our survey data to the following population: people aged eighteen to forty who had some college but no degree and who were no longer enrolled in college. We also limited our sample to citizens and Legal Permanent Residents. In our interviews, however, we did have one individual over age forty, two individuals who had a degree of some sort, one individual who was currently enrolled in school, and one undocumented participant. Both of the individuals who completed a degree had previously attempted and failed to gain a degree. This suggests both a limitation and an insight: (1) our data was primarily contained to the specific target population, but not completely contained, and (2) the themes we identified for our target population were consistent with outliers, suggesting a broader impact of the work and also calling for expanded research collection.

We did not control our data for geographic location, nor do we have the sample size to adequately understand the differences for students in different geographic locations, including rural, suburban, or urban. This is a particular limitation for our transportation findings and should be further studied.

Finally, as we have throughout our research, we recognize that Latinos in the United States are not a monolithic group. A first-generation immigrant might not have the same experience as a second- or third-generation immigrant. A Latino who traces his roots to Mexico may have a different experience than a Latino who traces his roots to Colombia.



